

KESIMPULAN DAN SARAN

A. KESIMPULAN

Kesimpulan yang didapat berdasarkan hasil penelitian adalah:

1. Sari buah belimbing dapat dibuat sediaan tablet hisap dengan bahan pengikat PVP.
2. Variasi konsentrasi bahan pengikat PVP berpengaruh terhadap sifat fisik tablet yaitu semakin tinggi konsentrasi PVP maka kekerasan semakin meningkat, dan waktu larut lebih lama.
3. Formula tablet hisap dengan konsentrasi PVP 3%, 5%, dan 7% telah memenuhi persyaratan uji sifat fisik tablet yang baik. Tetapi dilihat dari uji tanggap rasa formula 1 yang paling diterima oleh responden.

B. SARAN

1. Perlu dilakukan penelitian lebih lanjut tentang pembuatan tablet hisap sari buah belimbing dengan menggunakan metode lain.
2. Perlu dilakukan penelitian dengan menggunakan variasi bahan pengikat lain.

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Lampiran 1. Hasil determinasi



**UNIVERSITAS
SETIA BUDI**

UPT-LABORATORIUM

Nomor : 25/DET/UPT-LAB/4.03.2020
Hal : Hasil determinasi tumbuhan
Lamp. : -

Nama Pemesan : Anggie
NIM : 20171270B
Alamat : Program Studi D-3 Farmasi, Universitas Setia Budi, Surakarta

HASIL DETERMINASI TUMBUHAN

Nama sampel : Belimbing Buah (*Averrhoa carambola* L.)
Familia : Oxalidaceae.

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 – 15b. golongan 9. 197b – 208b –
219b – 220b – 224b – 225b – 227b – 229b – 230b – 234b – 235b – 236b – 237b – 238a.
familia 61. Oxalidaceae. a. 1. Averrhoa. 1a. *Averrhoa carambola* L.

Deskripsi:

Habitus : Pohon, tinggi 5-12 meter.
Batang : Bulat, berkayu, monopodial, tegak.
Daun : Majemuk, beranak daun ganjil, anak daun bulat telur memanjang, meruncing,
panjang 1,5-9 cm, lebar 1-4,5 cm, ke arah ujung poros semakin besar,
permukaan atas hijau tua, permukaan bawah hijau muda.
Bunga : Malai bunga kebanyakan terkumpul rapat, panjang 1,5-7,5 cm. Bunga sebagian
dengan benang sari pendek dan tangkai putik panjang, sebagian dengan benang

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sari panjang dan tangkai putik pendek. Kelopak tinggi lk 4 mm. Daun mahkota di tengah bergandengan, bulat telur terbalik memanjang, dengan pangkal dan tepi pucat. 5 benang sari yang di depan daun mahkota mereduksi menjadi staminodia.

Buah : Buni bulat memanjang, dengan 5 rusuk yang tajam, kuning muda, panjang 4-13 cm.

Akar : Tunggang.

Kepala UPT-LAB
Universitas Setia Budi



Asik Gunawan, Amdk

Surakarta, 4 Maret 2020

Penanggung jawab

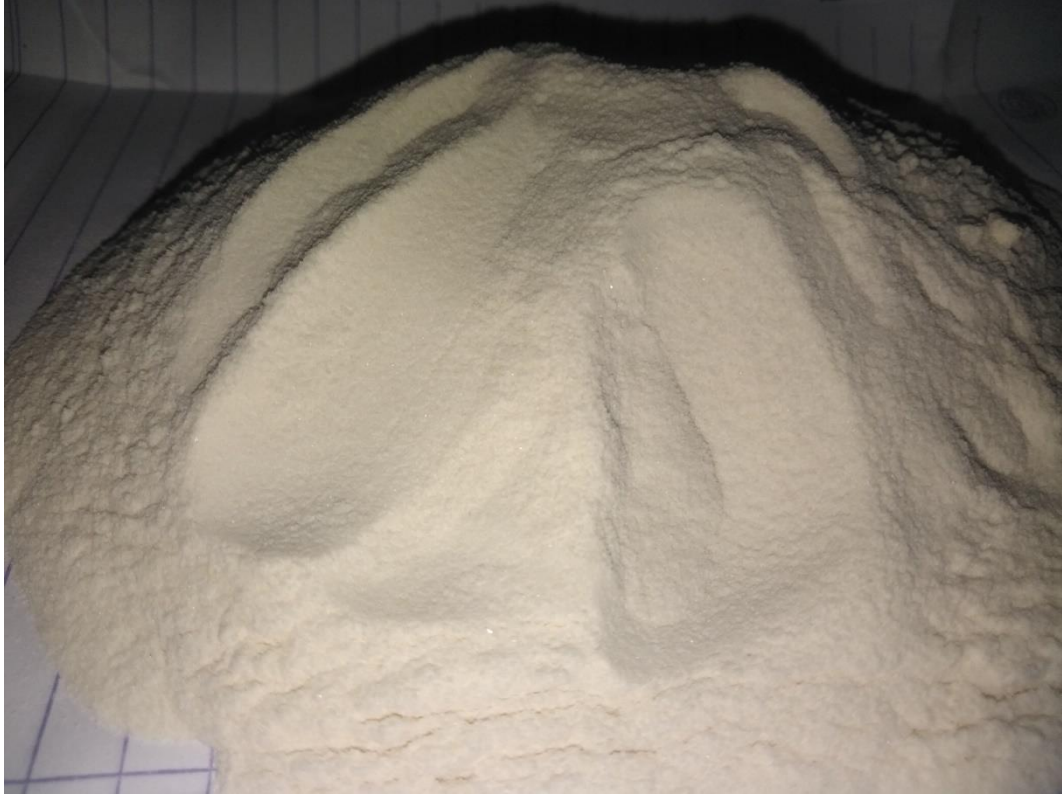
Determinasi Tumbuhan

Dra. Dewi Sulistyawati. M.Sc.

Lampiran 2. Gambar buah belimbing



Lampiran 3. Gambar serbuk sari buah belimbing



Lampiran 4. Hasil identifikasi kandungan kimia sari buah belimbing



Hasil identifikasi flavanoid



Hasil identifikasi saponin

Lampiran 5. Hasil granul sari buah belimbing



Formula I



Formula II



Formula III

Lampiran 6. Hasil tablet hisap sari buah belimbing



Formula I



Formula II



Formula III

Lampiran 7. Alat uji kekerasan (*Hardness tester*)



Lampiran 8. Mesin pencetak tablet



Lampiran 9. Alat uji susut pengeringan (*Moisture balance*)



Lampiran 10. Timbangan analitik



Lampiran 11. Perhitungan rendemen

Berat belimbing awal 500 gram

Penambahan maltodekstrin sebanyak 450 gram

Berat total 950 gram

Setelah dikerigkan hasil 500 gram

Untuk mengetahui berat kering = 500 gram – 450 gram = 50 gram sari yang didapat

$$\begin{aligned} \text{Rendemen} &= \frac{\text{berat kering}}{\text{berat basah}} \times 100\% \\ &= \frac{50 \text{ gram}}{500 \text{ gram}} \times 100\% \\ &= 10\% \end{aligned}$$

Lampiran 12. Perhitungan serbuk sari buah belimbing tiap tablet

Tiap tablet mengandung 15% serbuk sari buah belimbing untuk tablet dengan berat 600 mg.

Berat awal sari buah belimbing di dapat 500 gram

Penambahan maltodekstrin 450 gram, dengan berat total 950 gram.

Untuk mengetahui berat sari buah belimbing tiap tablet (x) dapat dihitung sebagai berikut :

$$\begin{aligned} \frac{\text{berat awal belimbing}}{\text{berat total}} &= \frac{x}{0,15} \\ \frac{500 \text{ gram}}{950 \text{ gram}} &= \frac{x}{0,15 \text{ gram}} \\ 950 \times x &= 500 \text{ gram} \times 0,15 \text{ gram} \\ x &= \frac{500 \text{ gram} \times 0,15 \text{ gram}}{950 \text{ gram}} \\ x &= 0,078 \text{ gram} = 78 \text{ mg} \end{aligned}$$

Lampiran 13. Hasil uji kadar air

Formula I

Replikasi	Kadar air (%)
1	3
2	3.2
3	3.2
Rata – rata \pm SD	3.13 \pm 0.11

Formula II

Replikasi	Kadar air (%)
1	3.4
2	3.3
3	3.3
Rata – rata \pm SD	3.33 \pm 0.05

Formula III

Replikasi	Kadar air (%)
1	3.5
2	3.3
3	3.5
Rata – rata \pm SD	3.43 \pm 0.11

Hasil Statistik Uji Kadar Air

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
NILAI	9	3,3000	,15811	3,00	3,50

One-Sample Kolmogorov-Smirnov Test

		NILAI
N		9
Normal Parameters ^{a,b}	Mean	3,3000
	Std. Deviation	,15811
Most Extreme Differences	Absolute	,167
	Positive	,167
	Negative	-,167
Test Statistic		,167
Asymp. Sig. (2-tailed)		,200 ^{c,d}

- a. Test distribution is Normal.
 b. Calculated from data.
 c. Lilliefors Significance Correction.
 d. This is a lower bound of the true significance.

Oneway

Descriptives

Uji kadar air

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					FORMULA I	3		
FORMULA II	3	3,3333	,05774	,03333	3,1899	3,4768	3,30	3,40
FORMULA III	3	3,4333	,11547	,06667	3,1465	3,7202	3,30	3,50
Total	9	3,3000	,15811	,05270	3,1785	3,4215	3,00	3,50

Test of Homogeneity of Variances

Uji kadar air

Levene Statistic	df1	df2	Sig.
1,778	2	6	,248

ANOVA

Uji kadar air

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,140	2	,070	7,000	,027
Within Groups	,060	6	,010		
Total	,200	8			

Post Hoc Tests

Multiple Comparisons

Uji kadar air

Tukey HSD

(I) FORMULA	(J) FORMULA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-,20000	,08165	,109	-,4505	,0505
	3	-,30000*	,08165	,024	-,5505	-,0495
2	1	,20000	,08165	,109	-,0505	,4505
	3	-,10000	,08165	,483	-,3505	,1505
3	1	,30000*	,08165	,024	,0495	,5505
	2	,10000	,08165	,483	-,1505	,3505

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

Uji kadar air

Tukey HSD^a

FORMULA	N	Subset for alpha = 0.05	
		1	2
3	3	3,1333	
2	3	3,3333	3,3333
1	3		3,4333
Sig.		,109	,483

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 14. Hasil uji waktu alir granul

Formula I

Replikasi	Waktu alir (detik)
1	5.14
2	6.01
3	5.80
Rata – rata \pm SD	1.65 \pm 0.45

Formula II

Replikasi	Waktu alir (detik)
1	6.92
2	5.88
3	5.72
Rata – rata \pm SD	1.17 \pm 0.65

Formula III

Replikasi	Waktu alir (detik)
1	5.78
2	6.64
3	5.64
Rata – rata \pm SD	6.02 \pm 0.54

Hasil Statistik waktu alir

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Uji waktu alir	9	5,9478	,53408	5,14	6,92

One-Sample Kolmogorov-Smirnov Test

	nilai
N	9
Normal Parameters ^{a,b}	Mean
	5,9478
Most Extreme Differences	Std. Deviation
	,53408
	Absolute
	,231
	Positive
	,231
	Negative
	-,171
Test Statistic	,231
Asymp. Sig. (2-tailed)	,180 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Oneway

Descriptives

Uji waktu alir

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					FORMULA I	3		
FORMULA II	3	6,1733	,65156	,37618	4,5548	7,7919	5,72	6,92
FORMULA III	3	6,0200	,54148	,31262	4,6749	7,3651	5,64	6,64
Total	9	5,9478	,53408	,17803	5,5372	6,3583	5,14	6,92

Test of Homogeneity of Variances

Uji waktu alir

Levene Statistic	df1	df2	Sig.
,458	2	6	,653

ANOVA

Uji waktu alir

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,434	2	,217	,705	,531
Within Groups	1,848	6	,308		
Total	2,282	8			

Post Hoc Tests

Multiple Comparisons

Uji waktu alir

Tukey HSD

(I) formula	(J) formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
FORMULA I	FORMULA II	-,52333	,45310	,519	-1,9136	,8669
	FORMULA III	-,37000	,45310	,707	-1,7602	1,0202
FORMULA II	FORMULA I	,52333	,45310	,519	-,8669	1,9136
	FORMULA III	,15333	,45310	,939	-1,2369	1,5436
FORMULA III	FORMULA I	,37000	,45310	,707	-1,0202	1,7602
	FORMULA II	-,15333	,45310	,939	-1,5436	1,2369

Uji waktu alir

Tukey HSD^a

Formula	N	Subset for alpha = 0.05
		1
FORMULA I	3	5,6500
FORMULA III	3	6,0200
FORMULA II	3	6,1733
Sig.		,519

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 15. Hasil uji sudut diam granul

Formula I

Replikasi	Sudut diam (°)
1	28.85
2	29.42
3	28.67
Rata – rata ± SD	28.86 ± 0.48

Formula II

Replikasi	Sudut diam (°)
1	27.96
2	26.79
3	27.74
Rata – rata ± SD	27.95 ± 0.62

Formula III

Replikasi	Sudut diam (°)
1	26.93
2	27.42
3	27.11
Rata – rata ± SD	27.15 ± 0.24

Hasil statistik sudut diam

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Uji sudut diam	9	27,8767	,92585	26,79	29,42

One-Sample Kolmogorov-Smirnov Test

		NILAI
N		9
Normal Parameters ^{a,b}	Mean	27,8767
Most Extreme Differences	Std. Deviation	,92585
	Absolute	,138
	Positive	,134
	Negative	-,138
Test Statistic		,138
Asymp. Sig. (2-tailed)		,200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Descriptives

Uji sudut diam

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					1	3		
2	3	27,4967	,62180	,35900	25,9520	29,0413	26,79	27,96
3	3	27,1533	,24786	,14310	26,5376	27,7690	26,93	27,42
Total	9	27,8767	,92585	,30862	27,1650	28,5883	26,79	29,42

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
2,137	2	6	,199

ANOVA

Uji sudut diam

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,655	2	2,827	14,105	,005
Within Groups	1,203	6	,200		
Total	6,858	8			

Post Hoc Tests

Multiple Comparisons

Uji sudutdiam

Tukey HSD

(I) FORMULA	(J) FORMULA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	1,48333*	,36556	,016	,3617	2,6050
2	3	1,82667*	,36556	,006	,7050	2,9483
3	1	-1,48333*	,36556	,016	-2,6050	-,3617
	3	,34333	,36556	,638	-,7783	1,4650
	1	-1,82667*	,36556	,006	-2,9483	-,7050
	2	-,34333	,36556	,638	-1,4650	,7783

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

Uji sudut diam

Tukey HSD^a

FORMULA	N	Subset for alpha = 0.05	
		1	2
3	3	27,1533	
2	3	27,4967	28,9800
1	3	,638	1,000
Sig.			

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 16. Hasil uji keseragaman bobot

Replikasi	Formula I (mg)	Formula II (mg)	Formula III (mg)
1	600	620	600
2	600	620	630
3	630	630	620
4	600	640	610
5	610	630	600
6	630	610	600
7	640	600	600
8	600	620	610
9	620	600	610
10	610	610	630
11	620	610	620
12	640	600	610
13	630	600	630
14	600	620	610
15	610	610	610
16	620	610	610
17	630	630	620
18	600	610	630
19	650	640	600
20	630	630	610
Rata – rata	618.5	617	613
SD	15.98519	13.01821	10.80935
CV	2.58456093	2.10992058	1.76335237

Perhitungan penyimpangan bobot tablet

FORMULA I

a. Kolom A

$$\frac{5}{100} \times 618.5 \text{ mg} = 30.925 \text{ mg}$$

$$BA = 618.5 \text{ mg} + 30.925 \text{ mg} = 649.425 \text{ mg}$$

$$BB = 618.5 \text{ mg} - 30.825 \text{ mg} = 587.575 \text{ mg}$$

$$\text{Range bobot tablet} = 587.575 \text{ mg} - 649.425 \text{ mg}$$

b. Kolom B

$$\frac{10}{100} \times 618.5 \text{ mg} = 61.85 \text{ mg}$$

$$BA = 618.5 \text{ mg} + 61.85 \text{ mg} = 680.35 \text{ mg}$$

$$BB = 618.5 \text{ mg} - 61.85 \text{ mg} = 556.65 \text{ mg}$$

$$\text{Range bobot tablet} = 556.65 \text{ mg} - 680.35 \text{ mg}$$

$$CV\% = \frac{sd}{\text{bobot rata-rata tablet}} \times 100\%$$

$$= \frac{15.98519}{618.5} \times 100\%$$

$$= 2,58 \%$$

Dari data keseragaman bobot, formula I memenuhi syarat uji keseragaman bobot.

FORMULA II

a. Kolom A

$$\frac{5}{100} \times 617 \text{ mg} = 30.85 \text{ mg}$$

$$BA = 617 \text{ mg} + 30.85 \text{ mg} = 647.85 \text{ mg}$$

$$BB = 617 \text{ mg} - 30.85 \text{ mg} = 586.15 \text{ mg}$$

$$\text{Range bobot tablet} = 586.15 \text{ mg} - 647.85 \text{ mg}$$

b. Kolom B

$$\frac{10}{100} \times 617 \text{ mg} = 61.7 \text{ mg}$$

$$BA = 617 \text{ mg} + 61.7 \text{ mg} = 678.7 \text{ mg}$$

$$BB = 617 \text{ mg} - 61.7 \text{ mg} = 555.3 \text{ mg}$$

$$\text{Range bobot tablet} = 555.3 \text{ mg} - 678.7 \text{ mg}$$

$$\begin{aligned} CV\% &= \frac{\text{sd}}{\text{bobot rata-rata tablet}} \times 100\% \\ &= \frac{13.01821}{617} \times 100\% \\ &= 2,10\% \end{aligned}$$

Dari data keseragaman bobot, formula II memenuhi syarat uji keseragaman bobot.

FORMULA III

a. Kolom A

$$\frac{5}{100} \times 613 \text{ mg} = 30.65 \text{ mg}$$

$$\text{BA} = 613 \text{ mg} + 30.65 \text{ mg} = 643.65 \text{ mg}$$

$$\text{BB} = 613 \text{ mg} - 30.65 \text{ mg} = 582.35 \text{ mg}$$

$$\text{Range bobot tablet} = 582.35 \text{ mg} - 643.65 \text{ mg}$$

b. Kolom B

$$\frac{10}{100} \times 613 \text{ mg} = 61.3 \text{ mg}$$

$$\text{BA} = 613 \text{ mg} + 61.3 \text{ mg} = 674.3 \text{ mg}$$

$$\text{BB} = 613 \text{ mg} - 61.3 \text{ mg} = 551.7 \text{ mg}$$

$$\text{Range bobot tablet} = 551.7 \text{ mg} - 674.3 \text{ mg}$$

$$\begin{aligned} \text{CV\%} &= \frac{\text{sd}}{\text{bobot rata-rata tablet}} \times 100\% \\ &= \frac{10.80935}{613} \times 100\% \\ &= 1.76 \text{ \%} \end{aligned}$$

Dari data keseragaman bobot, formula III memenuhi syarat uji keseragaman bobot.

Hasil statistik keseragaman bobot

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Keseragaman bobot	60	616,17	13,415	600	650

One-Sample Kolmogorov-Smirnov Test

		NILAI
N		60
Normal Parameters ^{a,b}	Mean	616,17
Most Extreme Differences	Std. Deviation	13,415
	Absolute	,210
	Positive	,210
	Negative	-,149
Test Statistic		,210
Asymp. Sig. (2-tailed)		,000 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Oneway

Descriptives

Keseragaman bobot

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					1	20		
2	20	617,00	13,018	2,911	610,91	623,09	600	640
3	20	613,00	10,809	2,417	607,94	618,06	600	630
Total	60	616,17	13,415	1,732	612,70	619,63	600	650

Test of Homogeneity of Variances

Keseragaman bobot

Levene Statistic	df1	df2	Sig.
2,519	2	57	,089

ANOVA

Keseragaman bobot

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	323,333	2	161,667	,895	,414
Within Groups	10295,000	57	180,614		
Total	10618,333	59			

Post Hoc Tests

Multiple Comparisons

Keseragaman bobot

Tukey HSD

(I) FORMU LA	(J) FORMULA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	1,500	4,250	,934	-8,73	11,73
	3	5,500	4,250	,404	-4,73	15,73
2	1	-1,500	4,250	,934	-11,73	8,73
	3	4,000	4,250	,617	-6,23	14,23
3	1	-5,500	4,250	,404	-15,73	4,73
	2	-4,000	4,250	,617	-14,23	6,23

Keseragaman bobotTukey HSD^a

FORMULA	N	Subset for alpha = 0.05 1
3	20	613,00
2	20	617,00
1	20	618,50
Sig.		,404

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20,000.

Lampiran 17. Hasil uji kekerasan

Formula I

Tablet ke-	Replikasi			
	I	II	III	
1	8.2	7.6	8.1	
2	8.8	7.4	7.6	
3	7.4	8.2	7.5	
4	9	7.6	7.7	
5	7.9	7.3	7.4	
6	8.7	7.2	8.3	
Rata –rata	8.33	7.55	7.76	7.88
SD	0.61	0.35	0.35	0.54

Formula II

Tablet ke-	Replikasi			
	I	II	III	
1	10.5	9	9.3	
2	8.9	10.2	8.5	
3	9.6	10.6	10.2	
4	10.1	10	10	
5	10.8	9.7	8.5	
6	9.3	9.6	10.8	
Rata –rata	9.86	9.85	9.55	9.75
SD	0.72	0.55	0.94	0.72

Formula III

Tablet ke-	Replikasi			
	I	II	III	
1	11.3	13.7	12	
2	11.5	12.5	12.3	
3	13.5	13.2	11.6	
4	12.6	13.3	11.7	
5	12	11.7	11	
6	12	11.4	12.5	
Rata –rata	12.15	12.68	11.85	12.22
SD	0.80	0.92	0.79	0.79

Hasil statistik uji kekerasan

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Uji kekerasan	54	9,950	1,9159	7,2	13,7

One-Sample Kolmogorov-Smirnov Test

		NILAI
N		54
Normal Parameters ^{a,b}	Mean	9,950
	Std. Deviation	1,9159
	Absolute	,097
	Positive	,097
	Negative	-,076
Test Statistic		,097
Asymp. Sig. (2-tailed)		,200 ^{c,d}

- a. Test distribution is Normal.
b. Calculated from data.

Oneway

Descriptives

Uji kekerasan

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					1	18		
2	18	9,756	,7278	,1715	9,394	10,117	8,5	10,8
3	18	12,211	,7992	,1884	11,814	12,609	11,0	13,7
Total	54	9,950	1,9159	,2607	9,427	10,473	7,2	13,7

Test of Homogeneity of Variances

Uji kekerasan

Levene Statistic	df1	df2	Sig.
1,371	2	51	,263

ANOVA

Uji kekerasan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	169,588	2	84,794	173,207	,000
Within Groups	24,967	51	,490		
Total	194,555	53			

Post Hoc Tests

Multiple Comparisons

Uji kekerasan

Tukey HSD

(I) FORMULA	(J) FORMULA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1		-1,8722*	,2332	,000	-2,435	-1,309
		-4,3278*	,2332	,000	-4,891	-3,765
2	1	1,8722*	,2332	,000	1,309	2,435
	3	-2,4556*	,2332	,000	-3,019	-1,893
3	1	4,3278*	,2332	,000	3,765	4,891
	2	2,4556*	,2332	,000	1,893	3,019

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

Uji kekerasan

Tukey HSD^a

FORMULA	N	Subset for alpha = 0.05
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		1	2	3
1	18	7,883		
2	18	1,000	9,756	12,211
3	18		1,000	1,000
Sig.				

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 18,000.

Lampiran 18. Hasil uji waktu larut

Replikasi	Formula I (menit)	Formula II (menit)	Formula III (menit)
1	6.44	7.21	7.31
2	6.07	7.01	6.59
3	5.34	6.58	6.42
4	5.08	6.14	6.58
5	6.45	6.52	7.06
6	5.13	5.27	7.35
7	7.16	8.51	9.17
8	6.57	6.36	7.10
9	8.31	8.03	8.33
10	6.11	7.12	9.34
11	6.07	6.25	6.43
12	5.29	5.57	6.03
13	5.11	5.26	8.46
14	8.49	8.38	9.54
15	6.16	5.52	6.10
16	5.21	5.34	6.48
17	5.26	5.43	5.56
18	6.00	7.03	7.10
19	5.53	6.18	6.45
20	5.12	5.53	6.23
Rata – rata	6.04	6.45	7.18
SD	1.00294	1.030934	1.172403

Hasil statistik uji waktu larut

NPar Test

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Waktu larut	60	6,5612	1,15468	5,08	9,54

One-Sample Kolmogorov-Smirnov Test

		NILAI
N		60
Normal Parameters ^{a,b}	Mean	6,5612
Most Extreme Differences	Std. Deviation	1,15468
	Absolute	,157
	Positive	,157
	Negative	-,100
Test Statistic		,157
Asymp. Sig. (2-tailed)		,001 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Oneway

Descriptives

Waktu larut

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					1	20		
2	20	6,4570	1,03094	,23053	5,9745	6,9395	5,16	8,51
3	20	7,1815	1,17240	,26216	6,6328	7,7302	5,56	9,54
Total	60	6,5612	1,15468	,14907	6,2629	6,8595	5,08	9,54

Test of Homogeneity of Variances

Uji waktu larut

Levene Statistic	df1	df2	Sig.
,410	2	57	,666

ANOVA

Uji waktu larut

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13,242	2	6,621	5,769	,005
Within Groups	65,422	57	1,148		
Total	78,664	59			

Post Hoc Tests

Multiple Comparisons

Uji waktu larut

Tukey HSD

(I) FORMULA	(J) FORMULA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-,41200	,33879	,449	-1,2273	,4033
	3	-1,13650*	,33879	,004	-1,9518	-,3212
2	1	,41200	,33879	,449	-,4033	1,2273
	3	-,72450	,33879	,091	-1,5398	,0908
3	1	1,13650*	,33879	,004	,3212	1,9518
	2	,72450	,33879	,091	-,0908	1,5398

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

Uji waktu larut

Tukey HSD^a

FORMULA	N	Subset for alpha = 0.05	
		1	2
1	20	6,0450	
2	20	6,4570	6,4570
Sig.	20	,449	7,1815 ,091

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20,000.

Lampiran 19. Angket Uji Tanggapan Rasa dan Waktu Larut Tablet Hisap Sari Buah Belimbing

IDENTITAS RESPONDEN

Nama :

Umur :

**ANGKET UJI TANGGAP RASA DAN WAKTU LARUT
TABLET HISAP SARI BUAH BELIMBING**

Bahan pengikat	Tanggapan Rasa Responden Terhadap Tablet Hisap Sari Buah Belimbing			Waktu larut (menit)
	Tidak manis	Kurang manis	manis	
PVP 3%				
PVP 5%				
PVP 7%				

Berilah tanda (√) pada kolom yang telah disediakan pada tanggapan rasa masing – masing tiap formula tablet hisap sari buah belimbing manis serta catat waktu yang diperlukan tablet hisap sari buah belimbing manis untuk larut sempurna dalam rongga mulut.

Lampiran 20. Hasil uji tanggap rasa

Replikasi	Nama	Responden rasa		
		Formula I	Formula II	Formula III
1	Syakila	Manis	Manis	Kurang Manis
2	Indah	Manis	Manis	Manis
3	Rolla	Manis	Manis	Manis
4	Sherlin	Manis	Manis	Kurang Manis
5	Sunarti	Manis	Manis	Manis
6	Jumarate	Manis	Manis	Manis
7	Maimunah	Manis	Manis	Manis
8	Summayah	Manis	Kurang Manis	Manis
9	Khadijah	Manis	Kurang Manis	Manis
10	Rizqa	Manis	Manis	Manis
11	Tasmin	Manis	Manis	Manis
12	Akbar	Manis	Manis	Manis
13	Welli	Manis	Manis	Manis
14	Juli	Manis	Manis	Manis
15	Zulhajrin	Manis	Kurang Manis	Manis
16	Anggun	Manis	Manis	Kurang Manis
17	Tri	Manis	Manis	Manis
18	Fatimah	Manis	Manis	Kurang Manis
19	Reva	Manis	Manis	Manis
20	Nurjannah	Manis	Manis	Manis