L A M P I R A N

Lampiran 1. Foto Determinasi tanaman kelapa sawit (*Elaeis guinnensis* Jacq)

KEMENTERIAN KESEHATAN REPUBLIK INDONESIA
BADAN KEBIJAKAN PEMBANGUNAN KESEHATAN
BALAI BESAR PENELITIAN DAN PENGEMBANGAN
TANAMAN OBAT DAN OBAT TRADISIONAL
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Laman b2p2toot.litbang.kemkes.go.id Surat Elektronik b2p2toot@litbang.kemkes.go.id

Nomor : KM.04.02/2/1416/2022 08 Agustus 2022
Hal : Keterangan Determinasi

Yth. Dekan Fakultas Farmasi Universitas Setia Budi
Jalan Letjend. Sutoyo, Solo 57127

Merujuk surat Saudara nomor: 843/H6-04/22.07.2022 tanggal 22 Juli 2022 hal permohonan determinasi, dengan ini kami sampaikan bahwa hasil determinasi sampel tanaman sebagai berikut:

Nama Pemohon	: Nadhia Nur Alfiah
Nama Sampel	: Sawit
Sampel	: Biji Sawit dan Foto
Spesies	: *Elaeis guineensis* Jacq.
Sinonim	: *Elaeis dybowskii* Hua
Familia	: Arecaceae
Penanggung Jawab	: Nina Kumianingrum, S.Si.

Hasil determinasi tersebut hanya mencakup sampel tanaman yang telah dikirimkan ke B2P2TOOT.

Atas perhatian Saudara, kami sampaikan terima kasih.

Kepala Balai Besar Penelitian
dan Pengembangan Tanaman Obat

Akhmad Saikhu, S.K.M., M.Sc.PH.

Dokumen ini ditandatangani secara elektronik melalui Aplikasi TNDE menggunakan sertifikat elektronik yang diterbitkan oleh BSrE. (1/1)

Lampiran 2. Foto hasil pengeringan cangkang kelapa sawit (*Elaeis guinnensis* Jacq).

Lampiran 3. Foto hasil pembuatan arang cangkang kelapa sawit (*Elaeis guinnensis* Jacq).

Lampiran 4. Foto hasil arang aktif cangkang kelapa sawit (*Elaeis guinnensis* Jacq).

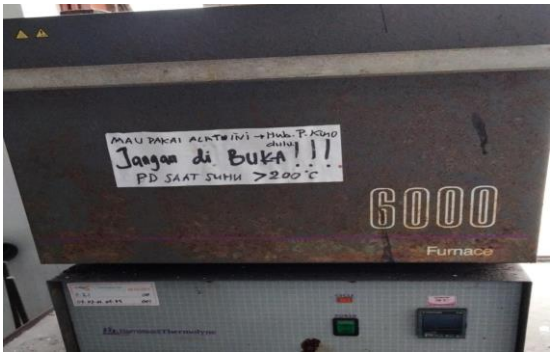
- **Sebelum diaktivasi**

- **Setelah diaktivasi**

Lampiran 5. Foto hasil uji mutu fisik arang aktif cangkang kelapa sawit (*Elaeis guinnensis* Jacq).

- **Uji Kadar Air**

- **Uji Kadar Abu**



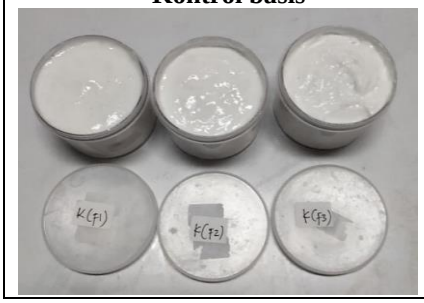
- **Uji Daya Serap Iod**

Lampiran 6. Foto hasil gigi sapi.

Lampiran 7. Foto hasil larutan kopi.

Lampiran 8. Foto hasil pengamatan mutu fisik pasta gigi

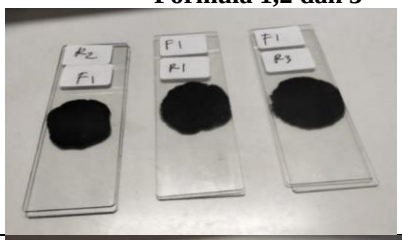
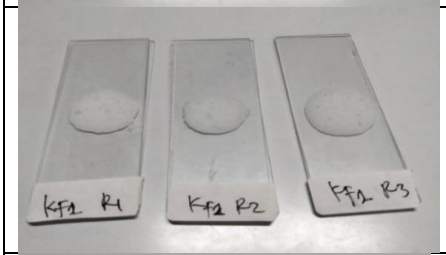
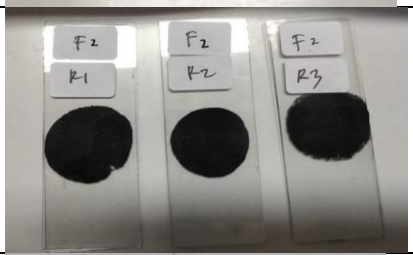
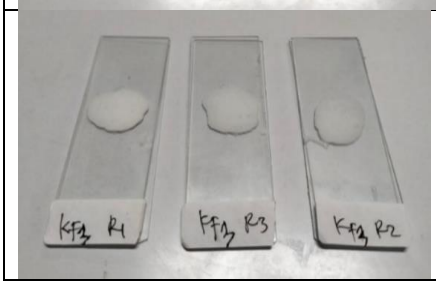
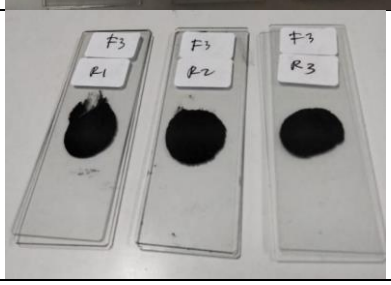
- **Organoleptis**

Kontrol basis	Formula 1,2 dan 3
	

Keterangan:

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

- **Homogenitas**

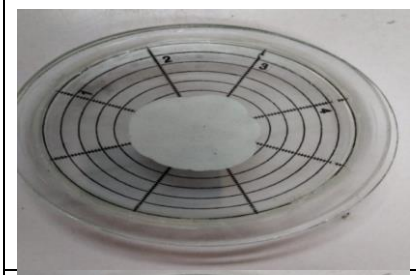
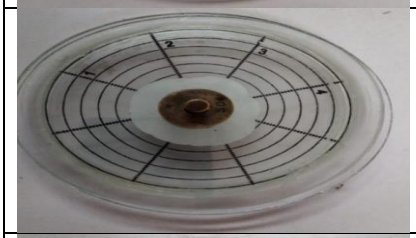
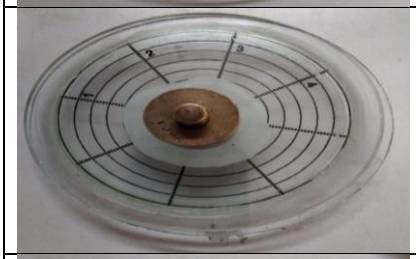
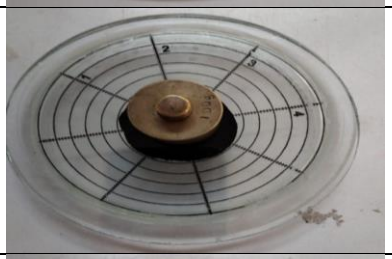
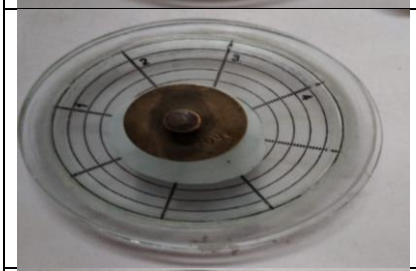
Kontrol basis	Formula 1,2 dan 3
	
	
	

Keterangan:
Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

- **Uji pH pasta gigi**

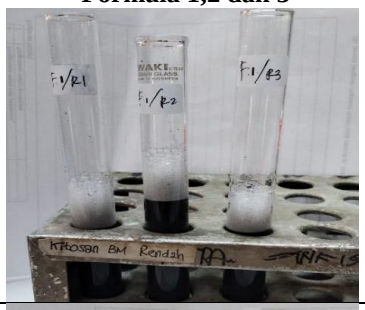
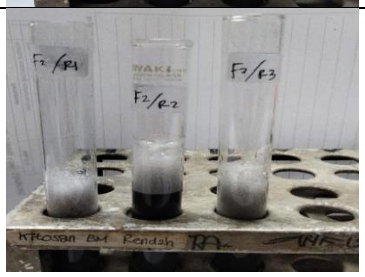
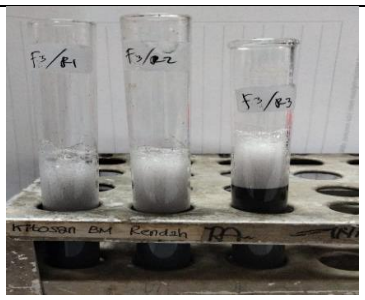
- **Uji viskositas pasta gigi**

- **Daya sebar pasta gigi**

Kontrol basis (beban 0-400gr)	**Formula 1,2 dan 3 (beban 0-400gr)**
	
	
	
	
	
	

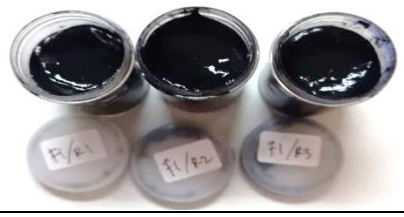
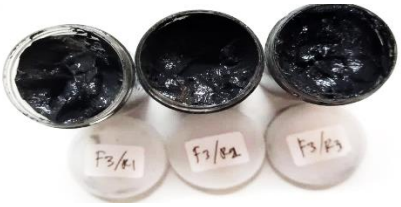
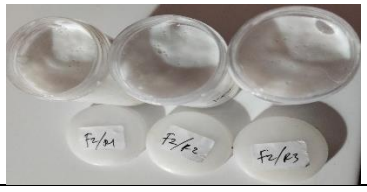
- **Uji daya lekat pasta gigi**

- **Uji tinggi busa pasta gigi**

Kontrol basis	Formula 1,2 dan 3
	
	
	

Keterangan:
Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

- **Uji *cycling test***

Sebelum *cycling test*	**Setelah *cycling test***
FORMULA 1 	**FORMULA 1** 
FORMULA 2 	**FORMULA 2** 
FORMULA 3 	**FORMULA 3** 
KONTROL FORMULA 1 	**KONTROL FORMULA 1** 
KONTROL FORMULA 2 	**KONTROL FORMULA 2** 

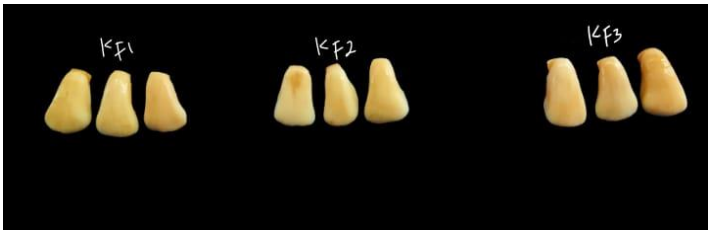
KONTROL FORMULA 3	KONTROL FORMULA 3
	

Keterangan:
Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

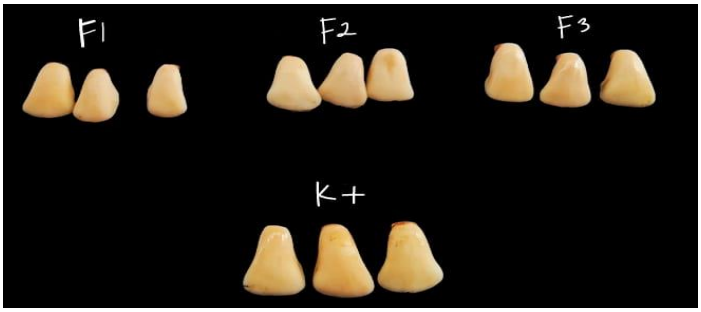
Lampiran 9. Foto hasil pengamatan aktivitas pemutih gigi.

- **Gigi setelah diskolorasi 10 hari**

  a. Kontrol basis



  b. Formula 1,2, 3 dan kontrol positif

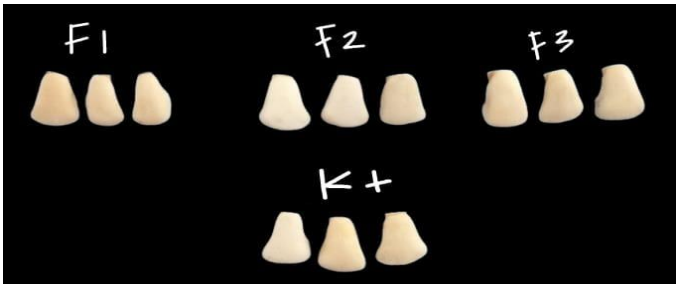


Keterangan:
Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

- **Gigi setelah disikat pasta arang aktif cangkang sawit (14 hari)**

  a. Kontrol basis

b. Formula 1, 2, 3 dan kontrol positif



Keterangan:
Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 10. Data kadar air arang aktif cangkang sawit

Replikasi	Berat crush kosong	Berat crush + arang aktif sebelum oven	Berat crush + arang aktif setelah di oven	Berat serbuk arang aktif awal	Berat serbuk arang aktif akhir (konstan)	Kadar air (%)
1	36,5881	37,5908	37,5210	1,0027	0,9329	6,96
2	38,7005	39,7222	39,6404	1,0217	0,9399	8,00
3	39,8621	40,8893	40,7864	1,0272	0,9243	10,02
					Rata – rata ± SD	8,33±1,55

Rumus kadar air: $\frac{\text{Bobot sebelum pengeringan-bobot setelah pengeringan}}{\text{Bobot sebelum pengeringan}}$

x 100%

Replikasi 1 = $\frac{1,0027-0,9329}{1,0027}$ x 100%=6,96%

Replikasi 2 = $\frac{1,0217-0,9399}{1,0217}$ x 100%=8,00%

Replikasi 3 = $\frac{1,0272-0,9243}{1,0272}$ x 100%=10,02%

Rata-rata = (R1+R2+R3) = (6,96 + 8,00 + 10,02) = 24,98/3 = 8,33%

Lampiran 11. Data kadar abu arang aktif cangkang sawit.

Replikasi	Berat crush kosong	Berat crush + arang aktif sebelum oven	Berat crush + arang aktif setelah di oven	Berat serbuk arang aktif awal	Berat serbuk arang aktif akhir (konstan)	Kadar abu (%)
1	64,6233	65,6958	64,7117	1,0725	0,0879	8,19
2	65,1090	66,1635	65,1905	1,0545	0,0815	7,73
3	61,6274	62,6450	61,7038	1,0176	0,0764	7,50
					Rata-rata ±SD	7,81±3,51

Rumus kadar abu = $\frac{\text{Bobot akhir (abu)}}{\text{Bobot awal (serbuk)}}$ x 100%

Replikasi 1 = $\frac{0,0879}{1,0725}$ x 100%=8,19%

Replikasi 2 = $\frac{0,0815}{1,0545}$ x 100%=7,73%

Replikasi 3 = $\frac{0,0764}{1,0176}$ x 100%=7,50%

Rata-rata = (R1+R2+R3) = (8,19 + 7,73 + 7,50) = 23,42/3 = 7,80%

Lampiran 12. Data daya serap iod arang aktif cangkang sawit.

Replikasi	Berat crush kosong	Berat crush + arang aktif	Berat arang aktif	Konsentrasi Iodin	Volume iodin yang diambil	Volume Na-tiosulfat untuk titrasi	Konsentrasi Na-tiosulfat	Hasil daya serap iod
1	33,0271	33,2794	0,2523	0,1N	10ml	5,0ml	0,1N	2.514,86
2	33,0292	33,2823	0,2531	0,1N	10ml	5,1ml	0,1N	2.456,77
3	33,0298	33,2798	0,2500	0,1N	10ml	5,1ml	0,1N	2.487,24
							Rata-rata±SD	2.486,29±29,06

Rumus = $\frac{(\text{ml sampel} - \frac{T \times C1}{C2}) \times W1}{\text{gram sampel}}$

Replikasi 1 = $\frac{(10\text{ml} - \frac{5,0 \times 0,1}{0,1}) \times 126,9}{0,2523 \text{ gram}}$

$= \frac{5,0 \times 126,9}{0,2523}$

= 2.514,86 mg/gram

Replikasi 2 = $\frac{(10\text{ml} - \frac{5,1 \times 0,1}{0,1}) \times 126,9}{0,2531 \text{ gram}}$

$= \frac{4,9 \times 126,9}{0,2531}$

= 2.456,77 mg/gram

Replikasi 3 = $\frac{(10\text{ml} - \frac{5,1 \times 0,1}{0,1}) \times 126,9}{0,25 \text{ gram}}$

$= \frac{4,9 \times 126,9}{0,25}$

= 2.487,24 mg/gramt

Rata-rata = (R1+R2+R3) = (2.514,86 + 2.456,77 + 2.487,24 mg/gram)

= 7.458,87/3 = 2.486,29 mg/gram

Lampiran 13. Bahan-bahan penelitian

- **Pembuatan larutan iodine 0,1N sebanyak 500ml**

a. Iodium kristal

$$N = \left(\frac{gr \times N}{Mr \times V}\right)$$

$$0{,}1N = \left(\frac{gr \times 2}{253{,}81 \times 0{,}5}\right)$$

gram = 6,34525 gram

+ Serbuk KI = 9 gram

Timbang kristal iodine 6,34525 gram + KI 9 gram kemudian masukan dalam beakerglass 500ml, larutkan dengan *aquadest* ad 500ml aduk sampai larut.

- **Pembuatan larutan Na-tiosulfat 0,1N 500ml**

b. $$N = \left(\frac{gr \times N}{Mr \times V}\right)$$

$$0{,}1N = \left(\frac{gr \times 1}{248{,}18 \times 0{,}5}\right)$$

gram = 12,409 gram

Timbang serbuk na-tiosulfat 12,409gram kemudian masukan dalam beakerglass 500ml, larutkan dengan *aquadest* ad 500ml aduk sampai larut.

Lampiran 14. Foto alat *shade guide vitapan classical*

Lampiran 15. Foto alat sikat gigi

Lampiran 16. Foto pasta gigi *sensatia botanicals*

Lampiran 17. Data hasil uji pH pasta gigi

Formula	*p*H			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1 (25%)	8,39	8,35	8,37	8,37	0,02
2 (35%)	8,19	8,24	8,2	8,21	0,03
3 (45%)	7,92	7,9	7,89	7,90	0,02
KF1 (25%)	8,36	8,38	8,37	8,37	0,01
KF2 (35%)	8,25	8,15	8,16	8,19	0,06
KF3 (45%)	7,94	7.88	7,98	7,96	0,03

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
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Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 18. Data hasil analisis SPSS uji pH pasta gigi

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
pH pastagigi	F1_kalsiumkarbonat25%	.175	3	.	1.000	3	1.000
	F2_kalsiumkarbonat35%	.314	3	.	.893	3	.363
	F3_kalsiumkarbonat45%	.253	3	.	.964	3	.637
	KF1_kalsiumkarbonat25%	.175	3	.	1.000	3	1.000
	KF2_kalsiumkarbonat35%	.353	3	.	.824	3	.174
	KF3_kalsiumkarbonat45%	.219	3	.	.987	3	.780

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

pH_pastagigi

Levene Statistic	df1	df2	Sig.
2.811	5	12	.066

ANOVA

pH_pastagigi

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6259.111	5	1251.822	107.299	.000
Within Groups	140.000	12	11.667		
Total	6399.111	17			

pH_pastagigi

Duncan[a]

Formula	N	Subset for alpha = 0.05		
		1	2	3
F3_kalsiumkarbonat45%	3	790.33		
KF3_kalsiumkarbonat45%	3	793.33		
KF2_kalsiumkarbonat35%	3		818.67	
F2_kalsiumkarbonat35%	3		821.00	
F1_kalsiumkarbonat25%	3			837.00
KF1_kalsiumkarbonat25%	3			837.00
Sig.		.303	.419	1.000

Means for groups in homogeneous subsets are displayed.

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

Lampiran 19. Data hasil uji viskositas pasta gigi

Formula	Viskositas (dPas)			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1 (25%)	160	170	160	163,3333333	5,77
3 (35%)	250	240	250	246,6666667	5,77
4 (45%)	500	500	490	496,6666667	5,77
KF1 (25%)	100	90	100	96,66666667	5,77
KF2 (35%)	150	150	170	156,6666667	11,55
KF3 (45%)	430	420	420	423,33	5,77

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 20. Data hasil analisis SPSS uji viskositas pasta gigi

Tests of Normality

	Formula	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Viskositas pastagigi	F1_kalsiumkarbonat25%	.385	3	.	.750	3	.000
	F2_kalsiumkarbonat35%	.385	3	.	.750	3	.000
	F3_kalsiumkarbonat45%	.385	3	.	.750	3	.000
	KF1_kalsiumkarbonat25%	.385	3	.	.750	3	.000
	KF2_kalsiumkarbonat35%	.385	3	.	.750	3	.000
	KF3_kalsiumkarbonat45%	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

Viskositas_pastagigi

Levene Statistic	df1	df2	Sig.
1.778	5	12	.192

Ranks

	Formula	N	Mean Rank
Viskositas pastagigi	F1_kalsiumkarbonat25%	3	7.17
	F2_kalsiumkarbonat35%	3	11.00
	F3_kalsiumkarbonat45%	3	17.00
	KF1_kalsiumkarbonat25%	3	2.00
	KF2_kalsiumkarbonat35%	3	5.83
	KF3_kalsiumkarbonat45%	3	14.00
	Total	18	

Test Statistics[a,b]

	Viskositas_pastagigi
Chi-Square	16.317
Df	5
Asymp. Sig.	.006

a. Kruskal Wallis Test
b. Grouping Variable: Formula

Viskositas_pastagigi

Duncan[a]

Formula	N	Subset for alpha = 0.05				
		1	2	3	4	5
KF1_kalsiumkarbonat25%	3	96.67				
KF2_kalsiumkarbonat35%	3		156.67			
F1_kalsiumkarbonat25%	3		163.33			
F2_kalsiumkarbonat35%	3			246.67		
KF3_kalsiumkarbonat45%	3				346.67	
F3_kalsiumkarbonat45%	3					496.67
Sig.		1.000	.271	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 21. Data hasil uji daya sebar pasta gigi

Formula	Beban (g)	Diameter penyebaran (cm)			Rata-rata	± SD
		Replikasi 1	Replikasi 2	Replikasi 3		
1 (25%)	0	2,7	2,4	2,6	2,566667	0,15
	50	3	2,9	3	2,966667	0,06
	100	3,5	3,2	3,1	3,266667	0,21
	200	3,8	3,6	3,2	3,533333	0,31
	300	4	3,8	3,5	3,766667	0,25
	400	4,3	4,2	3,8	4,1	0,26
2 (35%)	0	2,4	2,3	2,2	2,3	0,10
	50	2,7	2,5	2,5	2,566667	0,12
	100	2,9	2,7	2,7	2,766667	0,12
	200	3,3	2,9	3	3,066667	0,21
	300	3,5	3	3,2	3,233333	0,25
	400	3,8	3,4	3,4	3,533333	0,23
3 (45%)	0	1,4	1,5	1,4	1,433333	0,06
	50	1,6	1,7	1,6	1,633333	0,06
	100	1,8	1,7	1,7	1,733333	0,06
	200	2	1,9	1,8	1,9	0,10
	300	2,1	2,1	2,1	2,1	0,00
	400	2,5	2,3	2,3	2,366667	0,12
KF1 (25%)	0	3,3	3,3	3,3	3,3	0,00
	50	3,9	3,8	3,8	3,833333	0,06
	100	4,2	4,2	4,2	4,2	0,00
	200	4,6	4,6	4,6	4,6	0,00
	300	5,1	5,1	5,2	5,133333	0,06
	400	5,5	5,5	5,5	5,5	0,00
KF2 (35%)	0	3	3	3	3	0,00
	50	3,5	3,5	3,4	3,466667	0,06
	100	3,9	3,8	3,8	3,833333	0,06
	200	4,3	4,2	4,1	4,2	0,10
	300	4,5	4,8	4,9	4,733333	0,21
	400	5,1	5,1	5,2	5,133333	0,06
KF3 (45%)	0	2,9	2,9	3	2,933333	0,06
	50	3	3,1	3,2	3,1	0,10
	100	3,2	3,5	3,5	3,4	0,17
	200	3,5	3,7	3,9	3,7	0,20
	300	3,9	3,9	4,1	3,966667	0,12
	400	4,4	4,1	4,4	4,3	0,17

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 22. Data hasil uji analisis SPSS daya sebar pasta gigi

Test of Homogeneity of Variances

Dayasebar_pastagigi

Levene Statistic	df1	df2	Sig.
2.413	5	12	.098

ANOVA

Dayasebar_pastagigi

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1346.667	5	269.333	82.169	.000
Within Groups	39.333	12	3.278		
Total	1386.000	17			

Tests of Normality[b]

	Formula	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	Df	Sig.
Dayasebar_pastagigi	F1_kalsiumkarbonat25%	.253	3	.	.964	3	.637
	F2_kalsiumkarbonat35%	.292	3	.	.923	3	.463
	F3_kalsiumkarbonat45%	.175	3	.	1.000	3	1.000
	KF2_kalsiumkarbonat35%	.175	3	.	1.000	3	1.000
	KF3_kalsiumkarbonat45%	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

b. Dayasebar_pastagigi is constant when Formula = KF1_kalsiumkarbonat25%. It has been omitted.

Duncan[a]

Formula	N	Subset for alpha = 0.05				
		1	2	3	4	5
F3_kalsiumkarbonat45%	3	19.00				
F2_kalsiumkarbonat35%	3		30.67			
F1_kalsiumkarbonat25%	3			35.33		
KF3_kalsiumkarbonat45%	3			37.00		
KF2_kalsiumkarbonat35%	3				42.00	
KF1_kalsiumkarbonat25%	3					46.00
Sig.		1.000	1.000	.282	1.000	1.000

Means for groups in homogeneous subsets are displayed.

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

Lampiran 23. Data hasil uji daya lekat pasta gigi

Formula	Daya lekat (detik)			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1 (25%)	1,04	1,01	1,02	1,02	0,02
2 (35%)	1,31	1,41	1,36	1,36	0,05
3 (45%)	6,04	6,01	5,99	6,01333333	0,03
KF1 (25%)	0,49	0,53	0,52	0,51	0,02
KF2 (35%)	1,08	1,04	1,07	1,06	0,02
KF3 (45%)	5.31	5,29	5,36	5,33	0,05

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 24. Data hasil analisis SPSS uji daya lekat pasta gigi

Tests of Normality

	Formula	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Dayalekat pastagigi	F1_kalsiumkarbonat25%	.253	3	.	.964	3	.637
	F2_kalsiumkarbonat35%	.175	3	.	1.000	3	1.000
	F3_kalsiumkarbonat45%	.219	3	.	.987	3	.780
	KF1_kalsiumkarbonat25%	.292	3	.	.923	3	.463
	KF2_kalsiumkarbonat35%	.292	3	.	.923	3	.463
	KF3_kalsiumkarbonat45%	.276	3	.	.942	3	.537

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

dayalekat_pastagigi

Levene Statistic	df1	df2	Sig.
.880	5	12	.523

ANOVA

dayalekat_pastagigi

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	893177.111	5	178635.422	19370.106	.000
Within Groups	110.667	12	9.222		
Total	893287.778	17			

dayalekat_pastagigi

Duncan[a]

Formula	N	Subset for alpha = 0.05				
		1	2	3	4	5
KF1_kalsiumkarbonat25%	3	51.33				
F1_kalsiumkarbonat25%	3		102.33			
KF2_kalsiumkarbonat35%	3		106.33			
F2_kalsiumkarbonat35%	3			136.00		
KF3_kalsiumkarbonat45%	3				532.00	
F3_kalsiumkarbonat45%	3					601.33
Sig.		1.000	.133	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 25. Data hasil uji tinggi busa pasta gigi

Formula	Tinggi busa (cm)			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1 (25%)	12	12	11	11,67	0,58
2 (35%)	13	16	16	15,00	1,73
3 (45%)	17	20	20	19,00	1,73
KF1 (25%)	13	11	11	11,67	1,15
KF2 (35%)	14	16	16	15,33	1,15
KF3 (45%)	18	20	20	19,33	1,15

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 26. Data hasil analisis SPSS uji tinggi busa pasta gigi

Tests of Normality

	Formula	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	ff	Sig.
Tinggibusa_pastagigi	F1_kalsiumkarbonat25%	.385	3	.	.750	3	.000
	F2_kalsiumkarbonat35%	.385	3	.	.750	3	.000
	F3_kalsiumkarbonat45%	.385	3	.	.750	3	.000
	KF1_kalsiumkarbonat25%	.385	3	.	.750	3	.000
	KF2_kalsiumkarbonat35%	.385	3	.	.750	3	.000
	KF3_kalsiumkarbonat45%	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

Tinggibusa_pastagigi

Levene Statistic	df1	df2	Sig.
1.755	5	12	.197

Ranks

	Formula	N	Mean Rank
Tinggibusa pastagigi	F1_kalsiumkarbonat25%	3	3.67
	F2_kalsiumkarbonat35%	3	9.17
	F3_kalsiumkarbonat45%	3	15.33
	KF1_kalsiumkarbonat25%	3	3.50
	KF2_kalsiumkarbonat35%	3	9.67
	KF3_kalsiumkarbonat45%	3	15.67
	Total	18	

Test Statistics[a,b]

	Tinggibusa_pastagigi
Chi-Square	15.384
Df	5
Asymp. Sig.	.009

a. Kruskal Wallis Test
b. Grouping Variable: Formula

Tinggibusa_pastagigi

Duncan[a]

Formula	N	Subset for alpha = 0.05		
		1	2	3
F1_kalsiumkarbonat25%	3	11.67		
KF1_kalsiumkarbonat25%	3	11.67		
F2_kalsiumkarbonat35%	3		15.00	
KF2_kalsiumkarbonat35%	3		15.33	
F3_kalsiumkarbonat45%	3			19.00
KF3_kalsiumkarbonat45%	3			19.33
Sig.		1.000	.761	.761

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 27. Data hasil *cycling test* uji pH pasta gigi

Formula	*p*H sebelum *cycling Test*			*p*H sesudah *cycling Test*			Rata-rata ± SD sebelum		Rata-rata ± SD sesudah	
	Replikasi 1	Replikasi 2	Replikasi 3	Replikasi 1	Replikasi 2	Replikasi 3				
1 (25%)	8,39	8,35	8,37	8,37	8,36	8,35	8,37	0,02	8,36	0,01
2 (35%)	8,19	8,24	8,2	8,2	8,22	8,18	8,21	0,03	8,20	0,02
3 (45%)	7,92	7,9	7,89	7,9	7,85	7,9	7,903333	0,02	7,88	0,03
KF1 (25%)	8,36	8,38	8,37	8,31	8,36	8,35	8,37	0,01	8,34	0,03
KF2 (35%)	8,25	8,15	8,16	8,23	8,12	8,15	8,19	0,06	8,17	0,06
KF3 (45%)	7,94	7,88	7,98	7,98	7,86	7,92	7,93	0,05	7,92	0,06

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 28. Data hasil analisis SPSS *cycling test* pH pasta gigi

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	F1_Sebelum - F1_Setelah	1.000	1.732	1.000	-3.303	5.303	1.000	2	.423
Pair 2	F2_Sebelum - F2_Setelah	1.000	1.732	1.000	-3.303	5.303	1.000	2	.423
Pair 3	F3_Sebelum - F3_Setelah	2.000	3.000	1.732	-5.452	9.452	1.155	2	.368
Pair 4	KF1_Sebelum - KF1_Setelah	3.000	1.732	1.000	-1.303	7.303	3.000	2	.095
Pair 5	KF2_Sebelum - KF2_Setelah	2.000	1.000	.577	-.484	4.484	3.464	2	.074
Pair 6	KF3_Sebelum - KF3_Setelah	4.000	2.000	1.155	-.968	8.968	3.464	2	.074

Lampiran 27. Data hasil *cycling test* uji viskositas pasta gigi

Formula	Visko sebelum *cycling Test*			Viskos sesudah *cycling Test*			Rata-rata ±SD sebelum		Rata-rata ±SD sesudah	
	Replikasi 1	Replikasi 2	Replikasi 3	Replikasi 1	Replikasi 2	Replikasi 3				
1 (25%)	160	170	160	140	150	160	163,3	5,774	150,0	10,000
2 (35%)	250	240	250	250	250	230	246,7	5,774	243,3	11,547
3 (45%)	500	500	490	490	480	490	496,7	5,774	486,7	5,774
KF1 (25%)	100	90	100	90	80	100	96,7	5,774	90,0	10,000
KF2 (35%)	150	150	170	150	140	150	156,67	11,55	146,67	5,77
KF3 (45%)	430	420	420	410	410	420	423,33	5,77	413,33	5,77

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 29. Data hasil analisis SPSS *cycling test* viskositas pasta gigi

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 F1_Sebelum - F1_Setelah	13.333	11.547	6.667	-15.351	42.018	2.000	2	.184
Pair 2 F2_Sebelum - F2_Setelah	3.333	5.774	3.333	-11.009	17.676	1.000	2	.423
Pair 3 F3_Sebelum - F3_Setelah	10.000	10.000	5.774	-14.841	34.841	1.732	2	.225
Pair 4 KF1_Sebelum - KF1_Setelah	6.667	5.774	3.333	-7.676	21.009	2.000	2	.184
Pair 5 KF2_Sebelum - KF2_Setelah	10.000	10.000	5.774	-14.841	34.841	1.732	2	.225
Pair 6 KF3_Sebelum - KF3_Setelah	10.000	10.000	5.774	-14.841	34.841	1.732	2	.225

Lampiran 30. Data hasil *cycling test* uji tinggi busa pasta gigi

Formula	Tinggi busa sebelum *cycling Test*			Tinggi busa sesudah *cycling Test*			Rata-rata ± SD sebelum		Rata-rata ± SD sesudah	
	Replikasi 1	Replikasi 2	Replikasi 3	Replikasi 1	Replikasi 2	Replikasi 3				
1 (25%)	12	12	11	11	12	11	11,7	0,577	11,3	0,577
3 (35%)	13	16	16	13	15	14	15,0	1,732	14,0	1,000
3 (45%)	17	20	20	16	18	20	19,0	1,732	18,0	2,000
KF1 (25%)	13	11	11	11	11	10	11,7	1,155	10,7	0,577
KF2 (35%)	14	16	16	14	14	15	15,33	1,15	14,33	0,58
KF3 (45%)	18	20	20	16	18	20	19,33	1,15	18,00	2,00

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)

Lampiran 31. Data hasil analisis SPSS *cycling test* uji tinggi busa pasta gigi

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	F1_Sebelum - F1_Setelah	.333	.577	.333	-1.101	1.768	1.000	2	.423
Pair 2	F2_Sebelum - F2_Setelah	1.000	1.000	.577	-1.484	3.484	1.732	2	.225
Pair 3	F3_Sebelum - F3_Setelah	1.000	1.000	.577	-1.484	3.484	1.732	2	.225
Pair 4	KF1_Sebelum - KF1_Setelah	1.000	1.000	.577	-1.484	3.484	1.732	2	.225
Pair 5	KF2_Sebelum - KF2_Setelah	1.000	1.000	.577	-1.484	3.484	1.732	2	.225
Pair 6	KF3_Sebelum - KF3_Setelah	1.333	1.155	.667	-1.535	4.202	2.000	2	.184

Lampiran 32. Data hasil uji aktivitas pasta gigi

Formula	Replikasi	Data kuantitatif		Skor	Rata-rata	± SD
		Sebelum	Sesudah			
1 (25%)	1	B3	C2	7	6,33	0,5773503
	2	B3	C1	6		
	3	B3	C1	6		
2 (35%)	1	B3	B1	1	1,66	1,1547005
	2	B3	B1	1		
	3	B3	B2	3		
3 (45%)	1	B3	C1	6	6,00	0
	2	B3	C1	6		
	3	B3	C1	6		
KF1(25%)	1	B3	B3	11	11	0
	2	B3	B3	11		
	3	B3	B3	11		
KF2(35%)	1	B3	B3	11	11	0
	2	B3	B3	11		
	3	B3	B3	11		
KF3(45%)	1	B3	B3	11	11	0
	2	B3	B3	11		
	3	B3	B3	11		
K (+)	1	B3	B1	1	3,33	2,5166115
	2	B3	C1	6		
	3	B3	B2	3		

Formula 1: kalsium karbonat + zat aktif (25% : 12%)
Formula b 2: kalsium karbonat + zat aktif (35% : 12%)
Formula 3: kalsium karbonat + zat aktif (45% : 12%)
KF1 : kalsium karbonat 25% (kontrol basis)
KF2 : kalsium karbonat 35% (kontrol basis)
KF3 : kalsium karbonat 45% (kontrol basis)
K (+) : pasta gigi merk *sensatia botanicals*

Lampiran 33. Data analisis SPSS hasil uji aktivitas pasta gigi

Tests of Normality[b,c,d]

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
ujiaktivitas_pastagigi	F1_kalsiumkarbonat25%	.385	3	.	.750	3	.000
	F2_kalsiumkarbonat35%	.385	3	.	.750	3	.000
	F3_kalsiumkarbonat45%	.385	3	.	.750	3	.000
	Kontrolpositif_pasta merk	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction
b. ujiaktivitas_pastagigi is constant when Formula = KF1_kalsiumkarbonat25%. It has been omitted.
c. ujiaktivitas_pastagigi is constant when Formula = KF2_kalsiumkarbonat35%. It has been omitted.
d. ujiaktivitas_pastagigi is constant when Formula = KF3_kalsiumkarbonat45%. It has been omitted.

Test of Homogeneity of Variances

ujiaktivitas_pastagigi

Levene Statistic	df1	df2	Sig.
16.000	6	14	.000

Ranks

	Formula	N	Mean Rank
ujiaktivitas_pastagigi	F1_kalsiumkarbonat25%	3	5.50
	F2_kalsiumkarbonat35%	3	5.50
	F3_kalsiumkarbonat45%	3	5.50
	KF1_kalsiumkarbonat25%	3	17.00
	KF2_kalsiumkarbonat35%	3	17.00
	KF3_kalsiumkarbonat45%	3	17.00
	Kontrolpositif_pasta merk	3	9.50
	Total	21	

Test Statistics[a,b]

	ujiaktivitas_pastagigi
Chi-Square	19.234
Df	6
Asymp. Sig.	.004

a. Kruskal Wallis Test
b. Grouping Variable: Formula

ujiaktivitas_pastagigi

Duncan[a]

Formula	N	Subset for alpha = 0.05		
		1	2	3
F2_kalsiumkarbonat35%	3	1.67		
Kontrolpositif_pasta merk	3	3.33		
F3_kalsiumkarbonat45%	3		6.00	
F1_kalsiumkarbonat25%	3		6.33	
KF1_kalsiumkarbonat25%	3			11.00
KF2_kalsiumkarbonat35%	3			11.00
KF3_kalsiumkarbonat45%	3			11.00
Sig.		.077	.708	1.000

Means for groups in homogeneous subsets are displayed.

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