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KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN GIGI
RUMAH SAKIT GIGI DAN MULUT
KOMITE ETIK PENELITIAN KESEHATAN
Sekretariat : Lantai 2, Gedung Lama RSGM Unhas
JL.Kandea No. 5 Makassar
Contact Person: drg. Muhammad Ikbal. Sp.Pros/Nur Aedah AR TELP. 081342971011/08114919191

REKOMENDASI PERSETUJUAN ETIK
Nomor: 0032/PL.09/KEPK FKG-RSGM UNHAS/2021

Tanggal: 26 April 2021

Dengan ini menyatakan bahwa protokol dan dokumen yang berhubungan dengan protokol berikut ini telah mendapatkan persetujuan etik:

No. Protokol	UH 17120436	No Protokol Sponsor	
Peneliti Utama	drg. Aisyah Pertiwi Utami	Sponsor	Pribadi
Judul Peneliti	Evaluasi Perubahan Struktur Dentin Saluran Akar Setelah Aplikasi Ekstrak Daun Kelor (*Moringa oleifera*) Sebagai Alternatif Agen Kelator		
No. Versi Protokol	1	Tanggal Versi	26 April 2021
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	Laboratorium Fitokimia Sekolah Tinggi Ilmu Farmasi Makassar, Laboratorium Metalurgi Teknik Mesin Fakultas Teknik Unhas, dan Laboratorium Mikrostruktur Fakultas MIPA Universitas Negeri Makassar.		
Dokumen Lain			
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard	Masa Berlaku 26 April 2021- 26 April 2022	Frekuensi Review Lanjutan
Ketua Komisi Etik Penelitian	Nama: Dr. drg. Marhamah, M.Kes	Tanda Tangan	Tanggal
Sekretaris Komisi Etik Penelitian	Nama: drg. Muhammad Ikbal, Sp.Pros	Tanda Tangan	Tanggal

Kewajiban peneliti utama:
- Menyerahkan Amandemen Protokol untuk persetujuan sebelum diimplementasikan
- Menyerahkan laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan lapor SUSAR dalam 72 jam setelah peneliti utama menerima laporan.
- Menyerahkan laporan kemajuan (*progress report*) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah.
- Menyerahkan laporan akhir setelah penelitian berakhir.
- Melaporkan penyimpangan dari protokol yang disetujui (*protocol deviation/violation*)
- Mematuhi semua aturan yang berlaku.

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LAMPIRAN DOKUMENTASI

A. Pembuatan ekstrak Daun Kelor
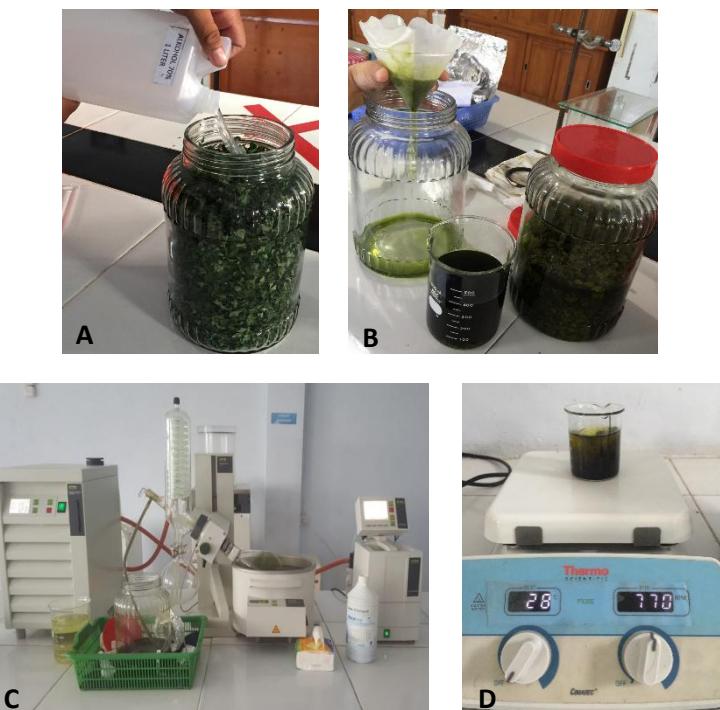
Gambar 1 A) Proses maserasi daun kelor;

B) Hasil maserasi daun kelor disaring menggunakan kertas
saring;

C) Larutan ekstrak daun kelor diuapkan menggunakan Rotavapor;

D) Ekstrak daun kelor disentrifugasi

B. Persiapan Spesimen
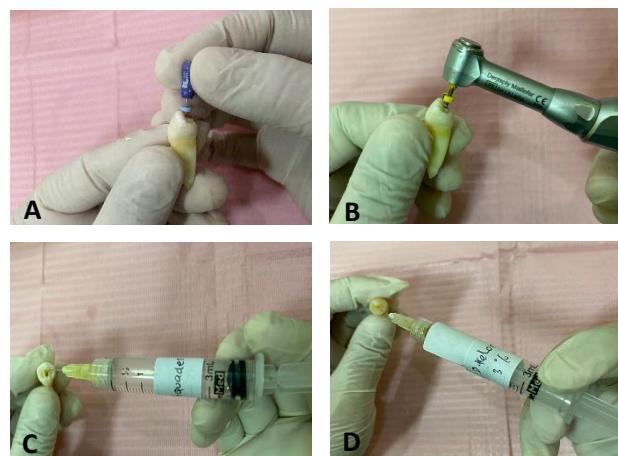
Gambar 2   A) Pengukuran panjang kerja spesimen;

B) Preparasi spesimen;

C) Irigasi spesimen;

D) Aplikasi larutan uji

C. Evaluasi Erosi Dentin

Gambar 3 A) Spesimen setelah dipotong; B) Pengamatan spesimen
dengan alat *Confocal Laser Scanning Microscopy* (CLSM)

D. Evaluasi $Ca^+ loss$

Gambar 3 A) Persiapan spesimen pada kaca preparat;
B) Evaluasi pada alat *X-Ray Powder Diffraction* (XRD)

LAMPIRAN HASIL ANALISIS

larutan

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	larutan	N	Percent	N	Percent	N	Percent
ca	aquades	6	100,0%	0	0,0%	6	100,0%
	ekstrak1	3	50,0%	3	50,0%	6	100,0%
	ekstrak2	3	50,0%	3	50,0%	6	100,0%
	edta	5	83,3%	1	16,7%	6	100,0%

Descriptives

	larutan			Statistic	Std. Error
ca	aquades	Mean		35,8333	2,40023
		95% Confidence Interval for Mean	Lower Bound	29,6633	
			Upper Bound	42,0033	
		5% Trimmed Mean		35,7593	
		Median		35,0000	
		Variance		34,567	
		Std. Deviation		5,87934	
		Minimum		29,00	
		Maximum		44,00	
		Range		15,00	
		Interquartile Range		11,25	
		Skewness		,339	,845
		Kurtosis		-1,591	1,741
	ekstrak1	Mean		1,1933	,14712
		95% Confidence Interval for Mean	Lower Bound	,5603	
			Upper Bound	1,8263	
		5% Trimmed Mean		.	
		Median		1,3200	
		Variance		,065	

	Std. Deviation		,25482	
	Minimum		,90	
	Maximum		1,36	
	Range		,46	
	Interquartile Range		.	
	Skewness		-1,684	1,225
	Kurtosis		.	.
ekstrak2	Mean		,9767	,13980
	95% Confidence Interval for Mean	Lower Bound	,3751	
		Upper Bound	1,5782	
	5% Trimmed Mean		.	
	Median		1,0800	
	Variance		,059	
	Std. Deviation		,24214	
	Minimum		,70	
	Maximum		1,15	
	Range		,45	
	Interquartile Range		.	
	Skewness		-1,571	1,225
	Kurtosis		.	.
edta	Mean		1,2740	,16952
	95% Confidence Interval for Mean	Lower Bound	,8033	
		Upper Bound	1,7447	
	5% Trimmed Mean		1,3000	
	Median		1,4300	
	Variance		,144	
	Std. Deviation		,37905	
	Minimum		,60	
	Maximum		1,48	
	Range		,88	
	Interquartile Range		,49	
	Skewness		-2,171	,913
	Kurtosis		4,757	2,000

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	larutan	Statistic	df	Sig.	Statistic	df	Sig.

ca	aquades	,185	6	,200*	,949	6	,729
	ekstrak1	,357	3	.	,815	3	,150
	ekstrak2	,332	3	.	,863	3	,277
	edta	,410	5	,006	,645	5	,002

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

a. Lilliefors Significance Correction

Kruskal-Wallis Test

Ranks

	larutan	N	Mean Rank
ca	aquades	6	14,50
	ekstrak1	3	5,33
	ekstrak2	3	3,67
	edta	5	7,80
	Total	17	

Test Statistics[a,b]

	ca
Chi-Square	12,343
df	3
Asymp. Sig.	,006

a. Kruskal Wallis Test

b. Grouping Variable:
larutan

Mann-Whitney Test

NPAR TESTS

```
/M-W= ca BY larutan(1 2)
/STATISTICS=DESCRIPTIVES
/MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	aquades	6	6,50	39,00
	ekstrak1	3	2,00	6,00
	Total	9		

Test Statistics[a]

	ca
Mann-Whitney U	,000
Wilcoxon W	6,000
Z	-2,324
Asymp. Sig. (2-tailed)	,020
Exact Sig. [2*(1-tailed Sig.)]	,024[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(1 3)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	aquades	6	6,50	39,00
	ekstrak2	3	2,00	6,00
	Total	9		

Test Statistics[a]

	ca
Mann-Whitney U	,000
Wilcoxon W	6,000

Z	-2,324
Asymp. Sig. (2-tailed)	,020
Exact Sig. [2*(1-tailed Sig.)]	,024[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(1 4)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	aquades	6	8,50	51,00
	edta	5	3,00	15,00
	Total	11		

Test Statistics[a]

	ca
Mann-Whitney U	,000
Wilcoxon W	15,000
Z	-2,745
Asymp. Sig. (2-tailed)	,006
Exact Sig. [2*(1-tailed Sig.)]	,004[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(2 1)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	aquades	6	6,50	39,00
	ekstrak1	3	2,00	6,00
	Total	9		

Test Statistics[a]

	ca
Mann-Whitney U	,000
Wilcoxon W	6,000
Z	-2,324
Asymp. Sig. (2-tailed)	,020
Exact Sig. [2*(1-tailed Sig.)]	,024[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(2 3)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	ekstrak1	3	4,33	13,00
	ekstrak2	3	2,67	8,00
	Total	6		

Test Statistics[a]

	ca
Mann-Whitney U	2,000
Wilcoxon W	8,000

Z	-1,091
Asymp. Sig. (2-tailed)	,275
Exact Sig. [2*(1-tailed Sig.)]	,400[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(2 4)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	ekstrak1	3	3,00	9,00
	edta	5	5,40	27,00
	Total	8		

Test Statistics[a]

	ca
Mann-Whitney U	3,000
Wilcoxon W	9,000
Z	-1,350
Asymp. Sig. (2-tailed)	,177
Exact Sig. [2*(1-tailed Sig.)]	,250[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(3 1)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	aquades	6	6,50	39,00
	ekstrak2	3	2,00	6,00
	Total	9		

Test Statistics[a]

	ca
Mann-Whitney U	,000
Wilcoxon W	6,000
Z	-2,324
Asymp. Sig. (2-tailed)	,020
Exact Sig. [2*(1-tailed Sig.)]	,024[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(3 2)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	ekstrak1	3	4,33	13,00
	ekstrak2	3	2,67	8,00
	Total	6		

Test Statistics[a]

	ca
Mann-Whitney U	2,000
Wilcoxon W	8,000
Z	-1,091
Asymp. Sig. (2-tailed)	,275
Exact Sig. [2*(1-tailed Sig.)]	,400[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(3 4)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	ekstrak2	3	3,00	9,00
	edta	5	5,40	27,00
	Total	8		

Test Statistics[a]

	ca
Mann-Whitney U	3,000
Wilcoxon W	9,000
Z	-1,350
Asymp. Sig. (2-tailed)	,177
Exact Sig. [2*(1-tailed Sig.)]	,250[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(4 1)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	aquades	6	8,50	51,00
	edta	5	3,00	15,00
	Total	11		

Test Statistics[a]

	ca
Mann-Whitney U	,000
Wilcoxon W	15,000
Z	-2,745
Asymp. Sig. (2-tailed)	,006
Exact Sig. [2*(1-tailed Sig.)]	,004[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(4 2)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	ekstrak1	3	3,00	9,00
	edta	5	5,40	27,00
	Total	8		

Test Statistics[a]

	ca
Mann-Whitney U	3,000
Wilcoxon W	9,000
Z	-1,350
Asymp. Sig. (2-tailed)	,177
Exact Sig. [2*(1-tailed Sig.)]	,250[b]

a. Grouping Variable: larutan

b. Not corrected for ties.

```
NPAR TESTS
  /M-W= ca BY larutan(4 3)
  /STATISTICS=DESCRIPTIVES
  /MISSING ANALYSIS.
```

Ranks

	larutan	N	Mean Rank	Sum of Ranks
ca	ekstrak2	3	3,00	9,00
	edta	5	5,40	27,00
	Total	8		

Test Statistics[a]

	ca
Mann-Whitney U	3,000
Wilcoxon W	9,000
Z	-1,350
Asymp. Sig. (2-tailed)	,177
Exact Sig. [2*(1-tailed Sig.)]	,250[b]

a. Grouping Variable: larutan

b. Not corrected for ties.