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LAMPIRAN

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS NEGERI MAKASSAR

LABORATORIUM MIKROSTRUKTUR JURUSAN FISIKA
Kampus: FMIPA Parang Tambung
Telp. (0411) 840622, Hp. 081 342 211 874

SERTIFICATE OF ANALYSIS
No. 031/UNM/LM/2022

Applicant	: drg. Sartika Rahmawati Rombelayuk
Sample ID	: Moringa oleifera leaves extract
Sample received	: March 2021
Sample Analyzed	: March 2021
Sample Quantity	: 3 samples for XRD

ANALYSIS

These samples were analyzed in our laboratory with X-Ray Diffraction (XRD) MiniFlex-Rigaku II and the data was analyzed by using PDXL2

No	Parameter	Unit	Results	Method
1	Intensity as a function of diffraction angle and FWHM determination	1 specimen	The size of the particle is around 2.67 nm	Debye-Scherrer Formula

The results of these analysis is only valid for the sample analyzed.

Makassar, 6 June 2022

Approved by,

Dr. Sabaruddin, M.Phil., Ph.D
Head of UNM Microstructur Laboratory

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: 0179/PL.09/KEPK FKG-RSGM UNHAS/2021

Tanggal: 27 Desember 2021

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

No. Protokol	UH 17120581	No Protokol Sponsor	
Peneliti Utama	drg. Sartika Rahmawati Rombe Layuk	Sponsor	Pribadi
Judul Peneliti	Evaluasi Berbagi Konsentrasi Nanopartikel Estrak Daun Kelor (Moringa Oleifera) Sebagai Alternatif Larutan Irigasi Terhadap Kekerasan Mikro Dentin Saluran Akar		
No. Versi Protokol	1	Tanggal Versi	16 Desember 2021
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	1. Laboratorium Mikrostruktur Fisika FMIPA UNM, 2. Laboratorium Biologi FMIPA UNM, 3. Kalultas Teknik Kimia Politeknik Negeri Ujung Pandang UNHAS, 4. RSGMP Unhas, 5. Laboratorium Metalurgi Teknik Mesin, 6. Fakultas Teknik Unhas		
Dokumen Lain			
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard	Masa Berlaku 27 Desember 2021-27 Desember 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:

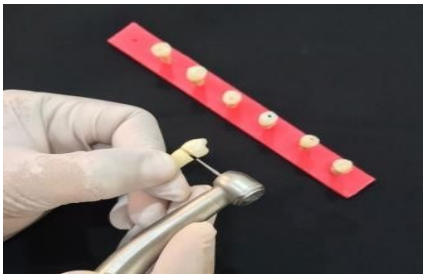
- Menyerahkan Amandemen Protokol untuk persetujuan sebelum diimplementasikan
- Menyerahkan laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan lapor SUSAR dalam 72 jam setelah peneliti utama menerima laporan.
- Menyerahkan laporan kemajuan (*progress report)* setiap 6 bulan untuk 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.

LAMPIRAN DOKUMENTASI

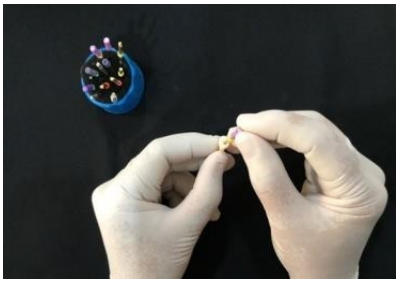
Pengambilan kelor

Pengambilan daun kelor
di daerah Gowa

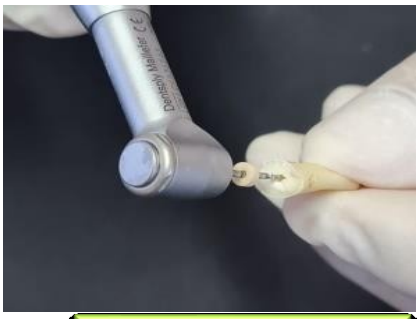
Pembuatan sampel/spesimen



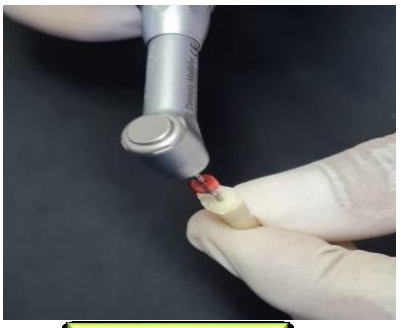
Dekoronisasi



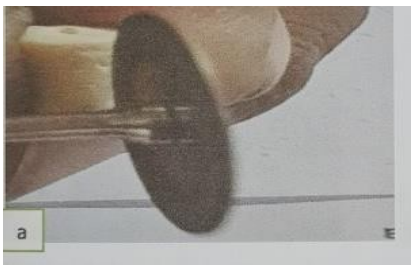
Penjajakan SA



Preparasi dengan proglider



Preparasi #X3



Pemotongan longitudinal

Setelah pemotongan longitudinal
dan ditanam diakrilik

Proses pembuatan nanopartikel ekstrak daun kelor

Daun kelor dipetik

Di oven

Selesai pengeringan

Setelah diblender
Digerus dgn mortar

Diayak dengan sieve
100 mesh

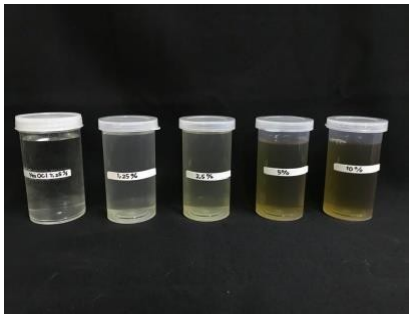
Di stirer

Prepitasi dengan
Whatman filter paper
no. 42

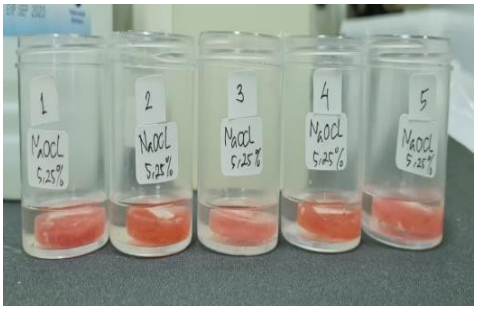
Hasil filter diuapkan

Serbuk nano

Gambar Uji Kekerasan Mikro Dentin

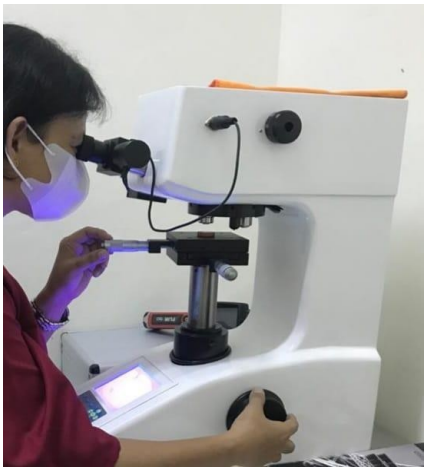


Konsentrasi berbagai larutan



Sampel direndam sebelum diuji

Alat Vickers Hardness Tester



Uji Kekerasan mikro dentin