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L A M P I R A N

SURAT IZIN PENELITIAN

PEMERINTAH PROVINSI SULAWESI SELATAN

DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU

Jl.Bougenville No.5 Telp. (0411) 441077 Fax. (0411) 448936
Website : http://simap-new.sulselprov.go.id Email : ptsp@sulselprov.go.id
Makassar 90231

Nomor : **11072/S.01/PTSP/2022**
Lampiran : -
Perihal : **Izin penelitian**

Kepada Yth.
Bupati Jenponto

di-
Tempat

Berdasarkan surat Dekan Fak. Kesehatan Masyarakat UNHAS Makassar Nomor : 12046//UN4.14.1/PT.01.04/2022 tanggal 13 Oktober 2022 perihal tersebut diatas, mahasiswa/peneliti dibawah ini:

N a m a : **NURHAYATI NAMIRA**
Nomor Pokok : K012202080
Program Studi : Kesehatan Masyarakat
Pekerjaan/Lembaga : Mahasiswa (S2)
Alamat : Jl. P. Kemerdekaan Km. 10, Makassar

Bermaksud untuk melakukan penelitian di daerah/kantor saudara dalam rangka menyusun Tesis, dengan judul :

" ANALISIS RISIKO PAJANAN MIKROPLASTIK (POLYSTYRENE) MELALUI KONSUMSI KERANG DARAH (ANADARA GRANOSA) PADA MASYARAKAT DI KAWASAN PESISIR DESA PAO KECAMATAN TAROWANG KABUPATEN JENEPONTO "

Yang akan dilaksanakan dari : Tgl. ***21 Oktober s/d 21 November 2022***

Sehubungan dengan hal tersebut diatas, pada prinsipnya kami ***menyetujui*** kegiatan dimaksud dengan ketentuan yang tertera di belakang surat izin penelitian.

Demikian Surat Keterangan ini diberikan agar dipergunakan sebagaimana mestinya.

Diterbitkan di Makassar
Pada Tanggal 21 Oktober 2022

A.n. GUBERNUR SULAWESI SELATAN
KEPALA DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU PROVINSI SULAWESI SELATAN

Ir. H. SULKAF S LATIEF, M.M.
Pangkat : PEMBINA UTAMA MADYA
Nip : 19630424 198903 1 010

Tembusan Yth
1. Dekan Fak. Kesehatan Masyarakat UNHAS Makassar di Makassar;
2. *Pertinggal.*

KUOSIONER PENELITIAN

ANALISIS RISIKO PAJANAN MIKROPLASTIK (*POLYSTYRENE*) MELALUI KONSUMSI KERANG DARAH (*ANADARA GRANOSA*) PADA MASYARAKAT DI KAWASAN PESISIR DESA PAO KECAMATAN TAROWANG KABUPATEN JENEPONTO

Kode Responden : ……

Tanggal wawancara :

A. Identitas responden

Nama :

Jenis kelamin :

Umur :

Alamat :

Pekerjaan :

Pendidikan terakhir :

B. Karakteristik Individu

Berat Badan : kg

C. Pajanan

1. Laju Asupan
   a. Berapa kali mengkonsumsi kerang dalam sehari……../hari
   b. Berapa banyak kerang yang dikonsumsi dalam sehari……..g/hari
   c. Jenis kerang yang dikonsumsi?
2. Lama responden telah mengkonsumsi kerang di lokasi penelitian…….tahun

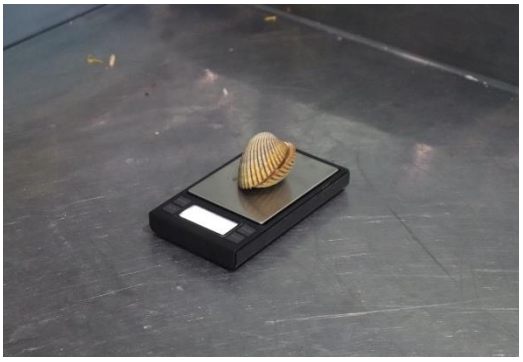
Lampiran
Dokumentasi Kegiatan

Proses wawancara responden

Proses edukasi responden

Pengambilan sampel kerang darah (*Anadara Granosa*)

Preparasi sampel kerang darah (*Anadara Granosa*)



Penimbangan berat sampel kerang dara (*Anadara Granosa*)

Proses identifikasi mikroplastik

Proses Analisis FTIR

Proses analisis FTIR

DATA RESPONDEN

KODE RESPONDEN	JK	UMUR	ALAMAT	TINGKAT PENDIDIKAN	BB (kg)	LAJU ASUPAN (g/hari)	FREKUENSI PAJANAN (hari/tahun)	LAMA TINGGAL (tahun)
KB1	P	34	Dusun Kampung Beru	SMP sederajat	60	470	144	34
KB2	P	28	Dusun Kampung Beru	SMP sederajat	65	470	144	26
KB3	L	37	Dusun Kampung Beru	SMP sederajat	70	470	96	37
KB4	P	38	Dusun Kampung Beru	SMA sederajat	70	470	192	38
KB5	L	39	Dusun Kampung Beru	SMP sederajat	60	313	192	31
TR1	L	45	Dusun Tonroa	SMP sederajat	38	235	192	45
TR2	P	44	Dusun Tonroa	SMA sederajat	45	188	144	44
TR3	P	39	Dusun Tonroa	SMA sederajat	56	470	144	39
TR4	P	40	Dusun Tonroa	SD sederajat	45	157	144	40
TR5	L	50	Dusun Tonroa	SMA sederajat	67	705	144	50
BD1	P	60	Dusun Kampung Bendi	TTSD	56	470	96	60
BD2	P	38	Dusun Kampung Bendi	SMA sederajat	50	313	192	38
BD3	L	32	Dusun Kampung Bendi	SMP sederajat	62	313	144	32
BD4	P	35	Dusun Kampung Bendi	SMP sederajat	47	470	144	31
BD5	L	32	Dusun Kampung Bendi	SMA sederajat	56	235	192	32
SM1	L	50	Dusun Sunggumanai	TTSD	49	235	96	50
SM2	P	47	Dusun Sunggumanai	SMA sederajat	50	157	144	47
SM3	P	32	Dusun Sunggumanai	SMP sederajat	50	235	144	32
SM4	L	33	Dusun Sunggumanai	SMA sederajat	51	235	192	33
SM5	L	45	Dusun Sunggumanai	SD sederajat	41	470	144	45
PA1	P	43	Dusun Pao	SMA sederajat	47	235	144	43
PA2	P	40	Dusun Pao	SMP sederajat	50	313	192	40
PA3	P	50	Dusun Pao	SD sederajat	60	157	96	50
PA4	P	53	Dusun Pao	TTSD	65	235	192	53
PA5	P	42	Dusun Pao	TTSD	54	470	96	42
KL1	L	41	Dusun Kaloko	SD sederajat	59	470	192	41
KL2	P	37	Dusun Kaloko	SMP sederajat	53	353	144	35
KL3	P	40	Dusun Kaloko	SMP sederajat	67	470	144	40
KL4	P	42	Dusun Kaloko	SD sederajat	71	235	144	42
KL5	L	44	Dusun Kaloko	SD sederajat	61	470	144	41

Data Pengamatan Mikroplastik Sampel Kerang Darah (anadara granosa)

No	Pot sampel kerang	parameter mikroplastik					Jumlah	Kelimpahan (item/g)	Kelimpahan (item/kg)
		Bentuk	Warna	Ukuran (mm)	Berat (gr)	Jenis polimer			
1	Kerang 1.1	Line	Transparan	3,397	0,0004	PS	1	0,01	10
2	Kerang 2.1	-	-	-	-	-	0	0	0
3	Kerang 3.1	Line	Biru	1,253	0,0002	PS	1	0,01	10
4	Kerang 4.1	-	-	-	-	-	0	0	0
5	Kerang 5.1	Line	Hitam	2,273	0,0002	PS, PE	1	0,01	10
6	Kerang 1.2	Line	Biru	0,800	0,0003	PS	1	0,01	10
7	Kerang 2.2	Line	Biru	1,019	0,0002	PS	5	0,05	50
		Line	Biru	1,186	0,0001	PS			
		Line	Biru	1,866	0,0002	PS			
		Line	Biru	1,338	0,0002	PS			
		Line	Merah	1,975	0,0002	PS			
8	Kerang 3.2	Line	Transparan	2,056	0,0001	PS	1	0,01	10
9	Kerang 4.2	Line	Biru	2,995	0,0003	PS	1	0,01	10
10	Kerang 5.2	Line	Biru	2,481	0,0003	PS	2	0,02	20
		Line	Ungu	0,904	0,0001	PS, LDPE, PVC			
11	Kerang 1.3	Line	Merah	0,351	0,0001	PS, PE	1	0,01	10
12	Kerang 2.3	Line	Biru	0,796	0,0000	PS	1	0,01	10
13	Kerang 3.3	Line	Transparan	1,610	0,0002	PS	4	0,04	40
		Line	Biru	0,854	0,0002	PS, PE			
		Line	Biru	0,366	0,0001	PS, PE			
		Fragment	Putih	0,746	0,0002	PS			
14	Kerang 4.3	Line	Biru	1,768	0,0002	PVC	4	0,04	40
		Line	Biru	1,036	0,0002	PS			
		Line	Transparan	1,512	0,0001	PS			
		Line	Transparan	1,127	0,0002	PS			
15	Kerang 5.3	Line	Hitam	2,107	0,0004	PS, LDPE, PE	1	0,01	10
16	Kerang 1.4	-	-	-		-	1	0,01	10
17	Kerang 2.4	Line	Biru	1,366	0,0002	PS	2	0,02	20
		Line	Biru	3,124	0,0002	PS			
18	Kerang 3.4	Line	Transparan	1,458	0,0002	PS, PE	1	0,01	10
19	Kerang 4.4	Line	Biru	1,751	0,0002	PS	1	0,01	10
20	Kerang 5.4	-	-	-	-	-	0	0	0
21	Kerang 1.5	Line	Biru	0,433	0,0001	PS	1	0,01	10
22	Kerang 2.5	Line	Transparan	1,946	0,0005	PS	1	0,01	10
23	Kerang 3.5	Fragmen	Kuning	1,190	0,0004	PS	4	0,04	40
		Fragmen	Kuning	1,124	0,0002	PS			
		Fragmen	Hitam	0,415	0,0001	PS			
		Line	Hijau	0,341	0,0000	PS			
24	Kerang 4.5	Fragmen	Putih	0,437	0,0004	PS	1	0,01	10
25	Kerang 5.5	-	-	-	-	-	0	0	0

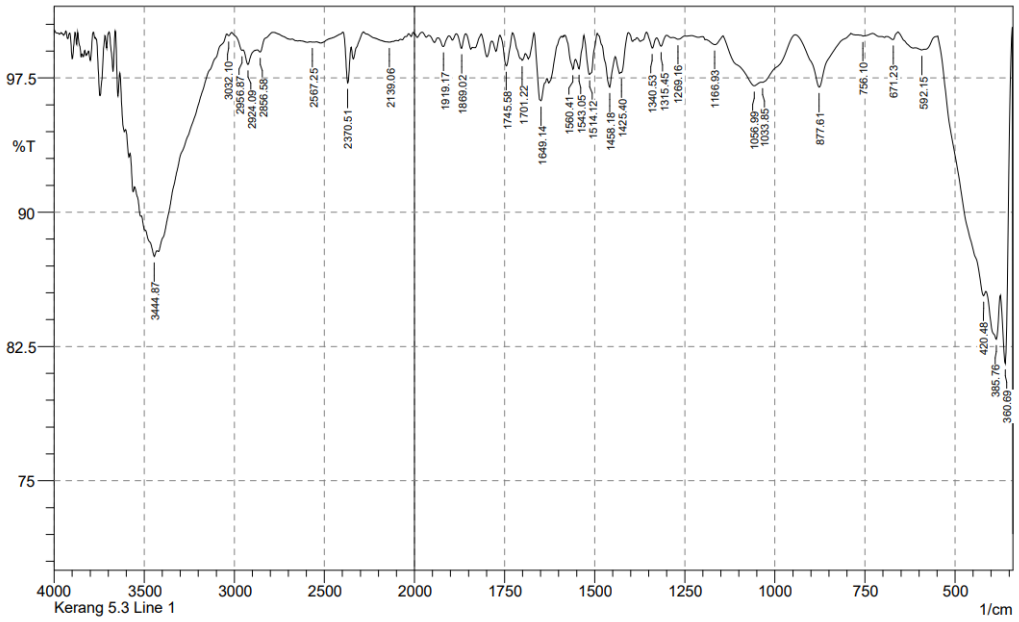
LAJU ASUPAN RESPONDEN

kode responden	jumlah mangkok/piring (tiap hari)	berat kerang setelah diolah (±470 gr/piring atau mangkok)	jumlah anggota keluarga yang ikut makan	gr DW / hari
KB1	2	940	2	470
KB2	3	1410	3	470
KB3	2	940	2	470
KB4	2	940	2	470
KB5	2	940	3	313
TR1	2	940	4	235
TR2	2	940	5	188
TR3	2	940	2	470
TR4	2	940	6	157
TR5	3	1410	2	705
BD1	2	940	2	470
BD2	2	940	3	313
BD3	2	940	3	313
BD4	1	470	1	470
BD5	1	470	2	235
SM1	1	470	2	235
SM2	1	470	3	157
SM3	2	940	4	235
SM4	1	470	2	235
SM5	2	940	2	470
PA1	1	470	2	235
PA2	2	940	3	313
PA3	1	470	3	157
PA4	1	470	2	235
PA5	1	470	1	470
KL1	1	470	1	470
KL2	3	1410	4	353
KL3	1	470	1	470
KL4	1	470	2	235
KL5	2	940	2	470

DATA ANALISIS TINGKAT RISIKO (*RISK QUOTIENT*)

NO	KODE RESPONDEN	C (mg/kg)	R (kg/hari)	FE (hari/thn)	Dt (tahun)	Wb (kg)	I non-Karsinogenik (30 thn)/10950 hari	I Karsinogenik (70 thn)/25550 hari	RQ Non Karsinogenik
1	KB1	0,017	0,47	144	34	60	0,000059542	0,000025518	0,00029771
2	KB2	0,042	0,47	144	26	65	0,000103838	0,000044502	0,00051919
3	KB3	0,042	0,47	96	37	70	0,000091476	0,000039204	0,00045738
4	KB4	0,017	0,47	192	38	70	0,000076054	0,000032594	0,00038027
5	KB5	0,042	0,313	192	31	60	0,000119094	0,000051040	0,00059547
6	TR1	0,040	0,235	192	45	38	0,000195184	0,000083650	0,00097592
7	TR2	0,017	0,188	144	44	45	0,000041096	0,000017612	0,00020548
8	TR3	0,036	0,47	144	39	56	0,000154962	0,000066412	0,00077481
9	TR4	0,042	0,157	144	40	45	0,000077081	0,000033035	0,00038541
10	TR5	0,042	0,705	144	50	67	0,000290591	0,000124539	0,00145296
11	BD1	0,036	0,47	96	60	56	0,000158935	0,000068115	0,00079468
12	BD2	0,040	0,313	192	38	50	0,000166842	0,000071504	0,00083421
13	BD3	0,017	0,313	144	32	62	0,000036116	0,000015478	0,00018058
14	BD4	0,042	0,47	144	31	47	0,000171222	0,000073381	0,00085611
15	BD5	0,042	0,235	192	32	56	0,000098893	0,000042383	0,00049447
16	SM1	0,040	0,235	96	50	49	0,000084093	0,000036040	0,00042047
17	SM2	0,036	0,157	144	47	50	0,000069868	0,000029943	0,00034934
18	SM3	0,042	0,235	144	32	50	0,000083070	0,000035602	0,00041535
19	SM4	0,040	0,235	192	33	51	0,000106649	0,000045707	0,00053325
20	SM5	0,036	0,47	144	45	41	0,000244218	0,000104665	0,00122109
21	PA1	0,017	0,235	144	43	47	0,000048066	0,000020600	0,00024033
22	PA2	0,042	0,313	192	40	50	0,000184404	0,000079030	0,00092202
23	PA3	0,042	0,157	96	50	60	0,000048175	0,000020647	0,00024088
24	PA4	0,017	0,235	192	53	65	0,000057117	0,000024479	0,00028559
25	PA5	0,040	0,47	96	42	54	0,000128195	0,000054941	0,00064098
26	KL1	0,036	0,47	192	41	59	0,000206167	0,000088357	0,00103084
27	KL2	0,042	0,353	144	35	53	0,000128755	0,000055181	0,00064378
28	KL3	0,042	0,47	144	40	67	0,000154982	0,000066421	0,00077491
29	KL4	0,040	0,235	144	42	71	0,000073125	0,000031339	0,00036563
30	KL5	0,040	0,47	144	41	61	0,000166173	0,000071217	0,00083087
nilai rata-rata		0,03553	0,34963	150,4	40,3667	55,83	0,000120799	0,000051771	0,00060400

HASIL FTIR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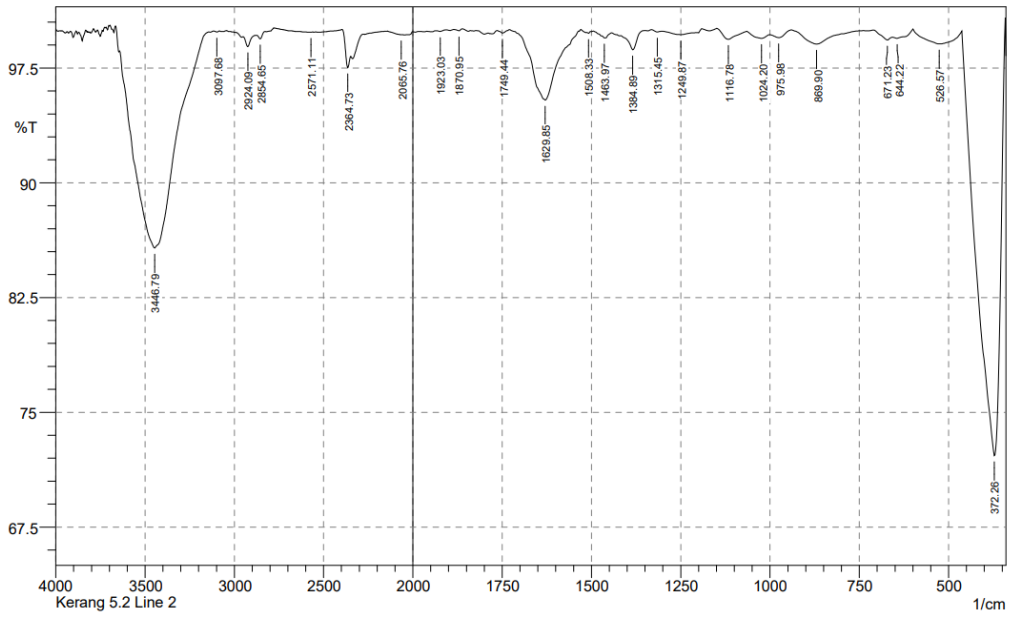
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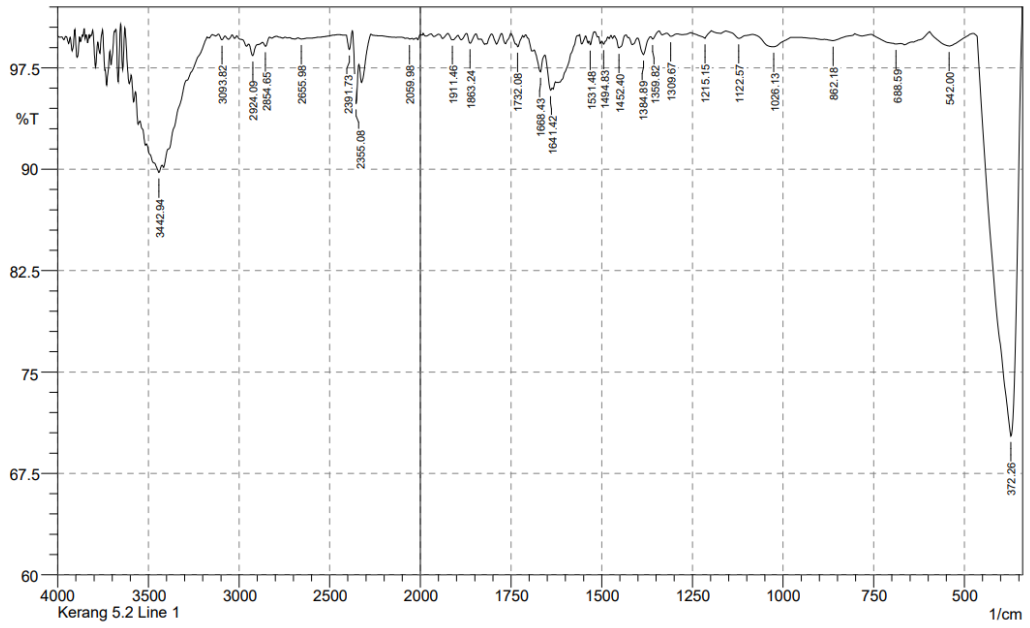
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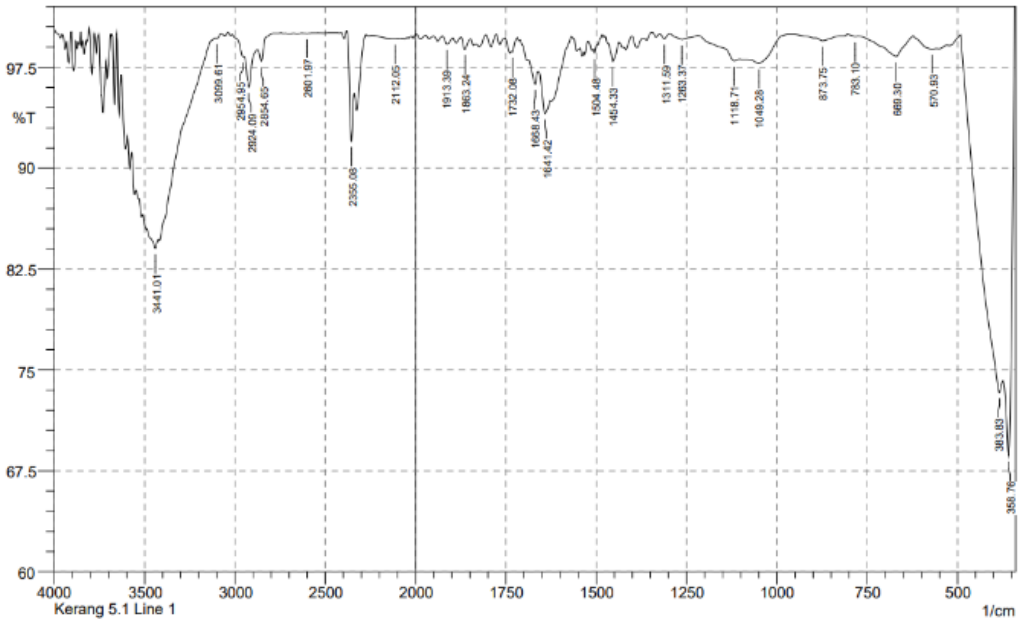
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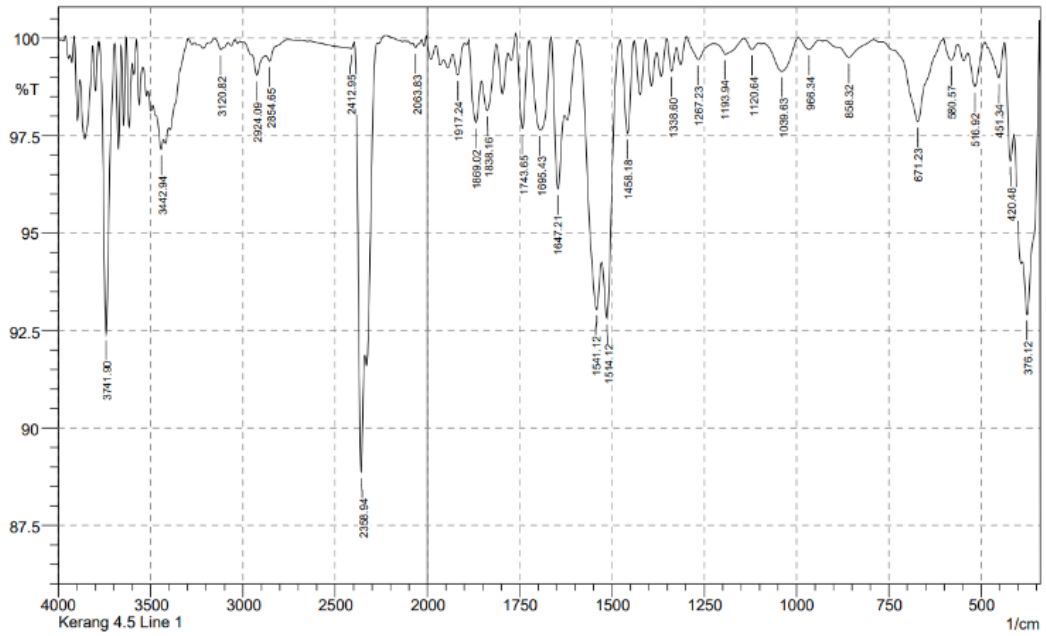
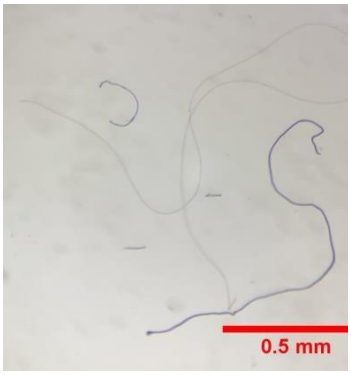
358.76

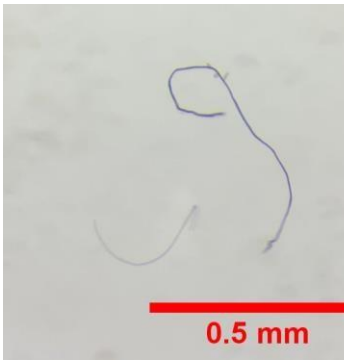

100
%T
97.5
95
92.5
90
87.5
3741.80
3442.94
3120.82
2924.09
2854.65
2412.95
2358.64
2063.83
1917.24
1869.02
1838.16
1743.65
1695.43
1647.21
1541.12
1514.12
1458.18
1338.60
1267.23
1193.94
1120.64
1039.63
968.34
858.32
671.23
580.57
516.92
451.34
420.48
376.12
4000
3500
3000
2500
2000
1750
1500
1250
1000
750
500
Kerang 4.5 Line 1
1/cm

DATA WARNA DAN BENTUK MIKROPLASTIK

BERDASARKAN HASIL FOTO DI MIKROSKOP



Mikroplastik pada Sampel Kerang 1.1



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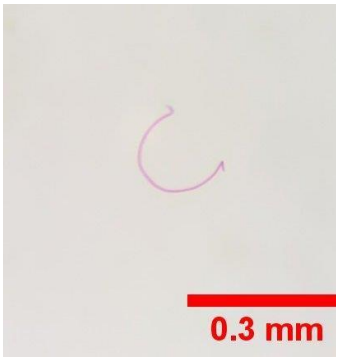
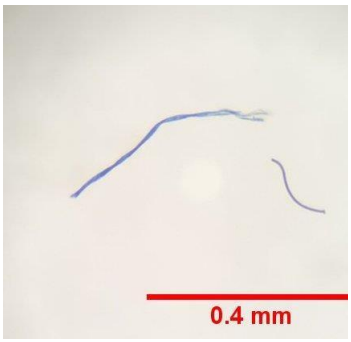


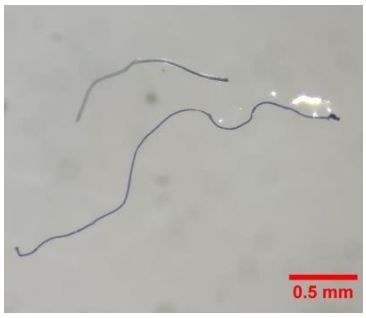
Mikroplastik pada Sampel Kerang 1.



Mikroplastik pada Sampel Kerang 1.5

Mikroplastik pada Sampel Kerang 2.2

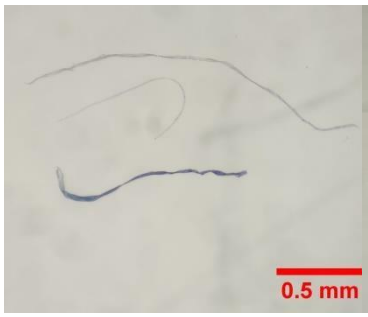
Mikroplastik pada Sampel Kerang 2.3



Mikroplastik pada Sampel Kerang 2.4

Mikroplastik pada Sampel Kerang 2.5

Mikroplastik pada Sampel Kerang 3.1



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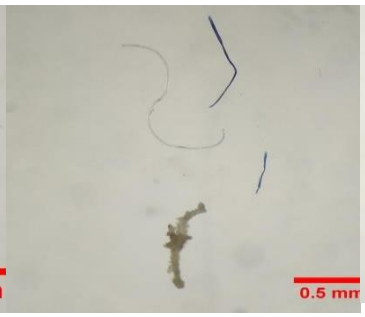

Mikroplastik pada Sampel Kerang 3.3

Mikroplastik pada Sampel Kerang 3.4

RIWAYAT HIDUP

NURHAYATI NAMIRA. Lahir pada tanggal 03 November 1992 di Kabupaten Jeneponto Provinsi Sulawesi Selatan. Anak pertama dari 3 bersaudara dari pasangan Yusrie Awal Palangkey dan Samsiah. Menempuh pendidikan dasar di SDN No. 48 Bontosunggu Kota Kabupaten Jeneponto tahun 2004, Sekolah menengah pertama tahun 2007 dan sekolah menengah atas tahun 2010 di Pondok Pesantren Tarbiyah Takalar, dan pada tahun 2014 meraih gelar sarjana di Program Studi Kesehatan Masyarakat Fakultas Kedokteran dan Ilmu Kesehatan Universitas Islam Negeri Alauddin Makassar.

Selain di bidang akademik, Penulis juga aktif dalam berbagai organisasi baik internal maupun eksternal kampus. Antara lain menjabat sebagai Sekretaris Dewan Racana di UIN Alauddin Makassar (2013-2014), Ketua Dewan Saka Bakti Husada Kota Makassar (2014-2015), Ketua Dewan Kerja Cabang Kabupaten Jeneponto (2015-2017), tergabung dalam Himpunan Mahasiswa Islam (HMI), Perguruan Seni Bela Diri Tapak Suci Muhammadiyah, Himpunan Pelajar dan Makasiswa Takalar (HIPERMATA),

Kelas Inspirasi Indonesia Mengajar, Youth for Climate Change (YFCC), Environmental Health Student Association, dan Aksi Indonesia Muda.

Pada tahun 2017-2022, Penulis mengabdi sebagai tenaga Penugasan Khusus Program Nusantara Sehat oleh Kementerian Kesehatan di wilayah 3T yakni Kabupaten Lombok Utara Provinsi Nusa Tengga Barat dan Kabupaten Sinjai Provinsi Sulawesi Selatan. Dalam penanganan Covid-19 Penulis juga terlibat sebagai relawan dari tim Kementerian Pertahanan di Rumah Sakit Suyoto Jakarta Selatan.

Bagi penulis “Hidup bukan tentang seberapa terkenal dan kaya dirimu, melainkan seberapa banyak ketenaran dan kekayaan tersebut berfaedah bagi orang lain”